PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

LOWER PROVINCES OF BENGAL

FOR THE YEAR

1890-91.

BY

E. P. DANSEY,

Conservator of Forests, Bengal.

Calcutta:
PRINTED AT THE BENGAL SECRETARIAT PRESS.
1891.

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No. 79A.R.—G.

FROM E. P. DANSEY, ESQ.,

Conservator of Forests, Bengal,

TO THE SECRETARY TO THE GOVERNMENT OF BENGAL,

REVENUE DEPARTMENT (FORESTS).

Dated Darjeeling, the 29th June 1891.

SIR,

I HAVE the honour to submit herewith the Progress Report of Forest Administration in Bengal for the year 1890-91.

2. It was only on the 22nd June 1891 that I received from the Comptroller and Auditor-General (Forests) the annual forms (58, 59, and 61) prescribed to be furnished to the Conservator by the Audit Office, with the information that the figures of receipts and charges (since adopted in my report) were subject to such alterations as may be found necessary on verification of the actual receipts and expenditure for the year with those in the books of the Accountant-General, Bengal.

3. As I have not been, up to date, informed of the correctness of the figures furnished by the Comptroller-General, I have thought it advisable not to delay the submission of the Report.

I have the honour to be,

SIR,

Your most obedient servant,

E. P. DANSEY,

Conservator of Forests, Bengal.

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN BENGAL

For the year 1890-91,

BY

E. P. DANSEY,

Conservator of Forests.

INTRODUCTION.

THE writer of this report assumed charge of the Bengal Conservatorship in October 1890, without any previous acquaintance with the forests of the Circle. Although he went into camp in November, and did not return finally to head-quarters until late in May, he was only able in that time to examine the forests of Darjeeling, Kurseong, the Sunderbuns, Singbhoom, and Angul, having seen nothing at all of the forests of Teesta, Julpigoree, Chittagong, Khoorda, Palamow, and Hazaribagh. Doubtless, after a first introduction to the Bengal forests, it will be possible for the Conservator to effect his annual tour more expeditiously, and, by commencing earlier, to accomplish more than the above; but it is improbable that he will, in any one year, be able to make a proper inspection of all the Divisions in this large Circle. It is not only that the area of the forests is so large, and that the blocks are so scattered, but the accounts and the correspondence are harassingly severe, and all added together constitute an amount of work that is almost beyond the powers of one man. Late in the season the appointment of a Personal Assistant did much to lighten the labours of the Conservator while on tour; but it is doubtful if this officer could have been spared for the purpose, but for the circumstance of his being too broken down in health to be fit for out-door duty, and he has since then been obliged to take furlough on medical certificate, leaving the establishment too reduced in numbers for it to be practicable to fill his place.

2. During the year the arrangement of forest charges was revised, with the result that the system of subdivisional charges, peculiar to Bengal, has since then been abolished, and the system prescribed in the Forest Department Code returned to. The territorial forest Divisions now stand as follow:—

1. The Darjeeling Division.
2. The Teesta „
3. The Kurseong „
4. The Julpigoree „
5. The Buxa „
6. The Sunderbuns „
7. The Chittagong Division.
8. The Pooree „
9. The Angul „
10. The Singbhoom „
11. The Palamow „
12. The Direction „

The Direction Division includes the Koderma reserve in Hazaribagh and the Ranchee reserve, the area of which is too small to form a separate charge, and too remote to be included in neighbouring forest Divisions.

As far as possible, and with a view to simplicity, the annual forms attached to the report for the present year have been drawn up in accordance with this re-arrangement of the charges.

CHAPTER I.—AREA AND BOUNDARIES.

1.—AREA.

1. The total area of reserved forests at the close of the year stood at 5,189 square miles, showing a decrease of 6 square miles, due to the exclusion of lot No. 240 of the Sunderbuns Division.

2. The total area of protected forests at the close of the year stood at 2,209 square miles, showing a decrease of 30 square miles, due to exclusion of lands required for the extension of cultivation in the Sunderbuns Division.

3. The total area of Unclassed Forests and Waste Lands under the partial management of the Forest Department cannot be accurately determined, but is presumed to exceed 4,500 square miles. No additions were made to this class of lands during the year.

4. In paragraph 4 of last year's report reference was made to the re-notification, under section 4 of the Forest Act, of a large number of existing reserves in this Circle, with the view to a more searching enquiry into the question of forest rights. This re-settlement is still proceeding.

5. Setting aside these previously existing reserves under settlement, there are some 183 square miles of forest that have been notified under section 4 of the Act, but not as yet under section 19. These areas are:—

	Square miles.
(1). The Sitakund-Ramghar proposed reserve in Chittagong, which was notified under section 4 of the Forest Act on the 22nd October 1888	133
(2). The Rajin proposed reserve in Orissa, which was notified under section 4 of the Forest Act on the 9th April 1889 ...	23
(3). The Mailong proposed reserve in Hazaribagh, which was notified under section 4 of the Forest Act on the 24th November 1890	16
(4). The Khoorchoota proposed reserve in Hazaribagh, which was notified under section 4 of the Forest Act on the 12th May 1885	11

6. The question of acquiring forest lands, either on lease or by purchase, in the Chota Nagpore province, which led to the able report written by Dr. Schlich in 1885 on the forest resources of that part of Bengal, has hitherto only resulted in the arrangements which are now being entered into for taking over, on a 50 years' lease, a portion of the Dalbhoom Encumbered Estate in Singbhoom, said to comprise an area of 161 square miles.

The private owners of forest in Hazaribagh, Lohardugga, and Manbhoom, who may still possess considerable areas of land under tree growth, have, in many instances, leased their estates to timber contractors for short periods, and it is almost certain that action has been too long delayed in this quarter for it to be now possible for the Government to acquire forests on reasonable terms, whether by lease or by purchase. The circumstances of the Dalbhoom case were exceptional.

7. But there is doubtless room for progress in other directions—in the Sonthal Pergunnahs, in Chittagong, and possibly in the districts bordering on Nepal.

The expediency of bringing the forests of the Sonthal Pergunnahs under the direct management of the department seems to have been acquiesced in as far back as 1883 (*see* paragraph 3 of the Resolution of the Government of Bengal on the Annual Progress Report of this Circle for the year 1882-83, as also Government of India letter No. 920F., dated 15th December 1883, to the Bengal Government). It seems anomalous that, while the State should have organized a department of experts for the special purpose of managing its properties in forest, and should have framed the Indian Forest Act of 1878, as the best legal basis on which to conduct such management, the Sonthal Pergunnahs, forests should, during all these years, continue to be administered by an unprofessional agency on the basis of an enactment which Act VII of 1878 was intended to supersede.

In the Chittagong district again it was proposed, as far back as 1882, to bring as many as 16 distinct tracts of forest under the management of the department (*see* the proposals contained in Officiating Collector of Chittagong's No. 712G, dated 24th June 1882, to the address of the Commissioner), but the only tangible result is the settlement, not yet completed, of the Sitakund-Ramghar forest.

2.—Boundaries.

8. Under the orders of Government, and consequent on the complaints made by the ryots of the estate, the alignment of the reserve boundaries in Angul, on the basis of the original settlement of those forests in 1883, was subjected to an enquiry, with the result that it was ascertained beyond doubt that the principles laid down for the guidance of the original Settlement Officers had not been in all cases observed, and still less so the requirements of the Forest Act, as shown in the concluding provision of section 7. Persons possessing undoubted rights over land comprised within the limits of the proposed reserves, under contracts in writing entered into by Government, were declared to have forfeited such rights for having failed to comply with the provisions of section 6 of the Act, and this notwithstanding that such rights could have been ascertained from the records of the local Court, and from the evidence of persons living in the locality.

Proposals are now before the Government for remedying this state of things.

In the neighbouring Government estate of Khoorda discontent is also rife at the policy hitherto pursued by the Forest Department, but it is hoped that in both cases means will be arrived at for satisfying the reasonable demands of the ryots without having recourse to radical changes in the constitution of the reserved forests

9. The boundaries between the reserved forests of the Angul Division and the neighbouring Tributary States remain still unsettled, and the same remark applies to the boundary between the Singbhoom reserves and the Tributary State of Keonjhur in Orissa.

Appendix A is an abstract statement showing the extent of the reserve boundaries and the works of demarcation and clearing executed during the year. It will be seen that Rs. 5,008 were expended on the maintenance of existing lines and marks of demarcation, as compared with Rs. 5,465 in the previous year. The principal works took place in Chittagong, Singbhoom, and Julpigoree, which together absorbed close on Rs. 4,000. All the reserved forests being demarcated, no new work of importance took place in this connection during the year.

CHAPTER II.—SURVEYS, WORKING-PLANS, AND ANNUAL PLANS OF OPERATIONS.

1.—Surveys.

10. In the Julpigoree district the Survey of India continued its operations. The interior details of several of the reserves are said to have been completed, and it was even hoped that the survey of all the Buxa reserved forests would have been finished by the close of the year; but difficulties in connection with the supply of labour, and sickness, are reported to have retarded the work.

11. The unsettled state of the boundaries between the Saranda reserved forest and the Tributary State of Keonjhur in Orissa prevented further progress by the Imperial Forest Survey party during the year in Singbhoom.

2.—Working-Plans.

12. At the close of the previous year, and until January of the year under report, the lines on which the working-plan for the Darjeeling forests was to be drawn up remained unsettled. The first thing that the present Conservator had to do, on his arrival in this Circle in October last, was to make a detailed examination of the Darjeeling forests, with a view to removing the dead-lock into which the whole question seemed to have subsided. His proposals having been accepted by the Inspector-General of Forests, work commenced in earnest, and it is believed that the plan will be ready for submission to Government in August next.

13. Dr. Schlich's scheme for the supply of Darjeeling and Jellapahar having lapsed at the commencement of the year, as explained in paragraph 14 of the report for 1889-90, the subsequent supply has been in all cases regulated by the professional advice of the officer engaged in preparing the working-plan for the Darjeeling forests.

14. Reports on the Kurseong and Sunderbuns reserved forests, combining in each case an outline of a proposed working plan, were prepared during the year, and submitted for the orders of the Local Government and the professional opinion of the Inspector-General of Forests. The Conservator's proposals in reference to the future management and working of the Sunderbuns forests have been referred to the Board of Revenue. An outline of a working-plan was also prepared for the Singbhoom reserves, and since the close of the year the principle of this has, with certain modifications, been accepted.

15. The determination of the principles on which a given working-plan shall be drawn up may be a sufficiently simple matter, but the construction of all the working plans required in this Circle, within reasonable limits of time, and with only one or two officers available for the purpose, if any at all, is not so. The divisional officers cannot assist, as their own duties employ the whole of their time, apart from which the interests involved in the preparation of most working-plans are too great for it to be advisable to entrust the collection of the materials to any forest officer. The backbone of most working-plans is the valuation survey of the forest, and what work is more generally rushed through than this? How few are the officers who will really sacrifice themselves to a work demanding such intelligent and careful attention, combined with such monotonous and arduous labour, as the forest valuation survey?

16. The whole of the year's work was on the basis of annual plans of operations, and, as far as possible, the provisions of these seem to have been carried out.

CHAPTER III.—PROTECTION AND IMPROVEMENT.

I.—Establishment.

17. Mr. Homo, the former Conservator of the Circle, proceeded on two years' furlough on the 8th October, being relieved by Mr. Dansey, Officiating Conservator, who was transferred from the charge of the Berar Circle for the purpose. Since the close of the year, Mr. Dansey has been confirmed in his appointment, and promoted to officiate in the second grade of Conservators.

Mr. Fowler, Deputy Conservator, who returned from 15 months' leave on the 10th August 1890, was subsequently invalided for nearly four months. Since the close of the year he has been compelled to take long leave again.

Mr. Heinig, Assistant Conservator, was on three months' privilege leave from the 20th August.

Mr. Haines, Assistant Conservator, obtained one month's examination leave.

Babu Shama Churn Chuckerbutty, Sub-Assistant Conservator, was more or less uninterruptedly on sick leave, and has, since the close of the year, obtained a further extension.

Forest life in Bengal does not appear to be even as healthy as it is in other Circles; and at the moment of writing this report, over 30 per cent. of the controlling staff are on leave—mostly privilege leave, it is true, but still leave supported by certificates of bad health.

18. The staff was strengthened during the year in the person of Mr. F. C. Henvey, Assistant Conservator, who was appointed under covenant with the Secretary of State, and reported himself for duty on the afternoon of the 6th January 1891.

19. The following officers of the controlling staff passed during the year in the subjects mentioned:—

Mr. H. H. Haines, Assistant Conservator (date of first appointment, 1st January 1889). In Hindustanee by the Higher Standard.

Mr. W. H. Lovegrove, Assistant Conservator (date of first appointment, 2nd January 1890). In Hindustanee by the Lower and Higher Standards, and in Forest Law and Land Revenue.

Mr. R. Quinnell, Sub-Assistant Conservator (date of first appointment, 4th December 1886). In Land Revenue.

Mr. E. J. N. James, Sub-Assistant Conservator (date of first appointment, 4th December 1886). In Hindustanee by the Higher Standard, in Forest Law, and in Land Revenue.

Very soon after the close of the year, Mr. F. C. Henvey, Assistant Conservator, who is referred to in the preceding paragraph, passed in Hindustanee by both the Lower and Higher Standards.

20. Mr. C. G. Rogers, Assistant Conservator, was transferred to the School Circle (Dehra Dun), on deputation, as Officiating Instructor, on the 8th June 1890, and it is believed that he will not return to Bengal.

21. The controlling staff in this Circle is at present weak, both as regards numbers and physical efficiency; and but for the recent abolition of the sub-divisional system of charges, which has liberated, for service elsewhere, three senior officers, it would be difficult to carry on special works (such as working-plans) during the ensuing year.

22. Coming now to the subordinate establishment, Mirza Surferaz Begg, Forest Ranger, whose case was referred to in paragraph 20 of last year's report, was dismissed the service under the orders of Government.

Mr. L. Miller, a Forest Ranger on probation, in charge of the Darjeeling Fuel Depôt, was charged with misappropriation of Government money to the extent of Rs. 970, convicted, and sentenced to three months' rigorous imprisonment and a fine of Rs. 970; or in default of payment to a further term of imprisonment of three months.

In the Teesta Division, Baboo Kalloo Singh, head clerk, was dismissed the service for general neglect of duty, and, on appeal, the decision of the Conservator was upheld.

Officiating Forester Sasti Churn Sen, referred to in paragraph 20 of last year's report, was arrested during the year; but the case ended by his being merely dismissed the service.

The ringleader in the Chittagong case of murder and robbery, referred to in paragraph 21 of last year's report, is still at large.

In February, the office of the Assistant Conservator, in charge of the Singbhoom Division, was broken into and Government money amounting to Rs. 105 stolen. On report of the circumstances to Government, the head clerk and the Assistant Conservator were directed to make good the amount between them, as there was evidence of carelessness and neglect of rules on both sides.

In April 1890, the cash chest of the Surtah toll station, in Chittagong, was carried off, broken into, and Government money amounting to Rs. 296 stolen. The Forester in charge made good the loss; but the thieves have not been traced.

Another case reflecting on the executive and protective staff of the department was that brought in Chittagong against Forester Pran Krishna Chowdhury and two Forest Guards for neglecting to report a theft of Government money from the Bagkhally toll station, the loss having been made good between the parties very soon after the discovery of the theft. The implication of the two Guards in the robbery being beyond doubt, the Government has since directed them to be dismissed the service.

Compared with other Circles, the material hitherto obtained for the executive and protective forest establishment in Bengal is decidedly inferior. It is not only that the Bengalee is by nature less fit, and has a rooted dislike for a jungle life: the prospects of advancement held out to him in the Bengal Forest Service have been hitherto restricted to a degree which is not seen in any other Circle, and this nothwithstanding an exceptionally unhealthy forest climate. Thus the best paid executive post to which an officer can aspire, below the rank of Sub-Assistant Conservator, is that of a Ranger on Rs. 80 per mensem; and there are only two such appointments in the whole Circle. In fact, the average pay of the Bengal Ranger *is at present Rs. 56 per mensem* only, against Rs. 70 in the Central Provinces and the Punjab, Rs. 74 in Burmah, and Rs. 65 in the North-Western Provinces and Oudh. The entire grant for subordinate forest establishments in Bengal aggregates Rs. 90,000 per annum, and this dates back from the year 1884. It is impossible to improve existing conditions without a considerable increase to this grant. Much has been done during the year by promoting men of long service and good character, and by confirming in their appointments, or giving the full pay of their appointments, to officers who were being kept on probation on reduced and insufficient salaries.

But the available balance from the sanctioned grant was not large enough to effect any further improvement in the condition of the subordinate staff, and the prevailing feature in the executive branches of the Forest Service of

Bengal continues to be a total absence of well-paid posts below the rank of Sub-Assistant Conservator; and an area of forests amounting to:—

	Square miles.
Reserved Forests	5,189
Protected „	2,209
Unclassed „	4,034
Total ...	11,432

is watched and looked after by the small and poorly appointed staff of 23 Rangers on an average pay of Rs. 56 per mensem, 89 Foresters at Rs. 28, and 313 Guards at Rs. 7, the total monthly expenditure on which is Rs. 5,884.

It must, however, not be lost sight of here that only the inducement of proportionately higher salaries than are to be obtained in other departments will tempt the better classes of Bengalee to take to a forest life. At present this inducement is all in the other direction. The educated Bengalee is by nature timorous, and setting aside his not unjustifiable dread of jungle fevers, his every-day round of duties in the forest, as a Ranger or Forester, is in frequent cases made a burden to his soul by distempered visions of evil spirits and beasts of prey lying in wait, the united effects of this state of mind and of his preference for a town life being that he in the end too often neglects his work, is repeatedly absent on (sick) leave, and watches for an opportunity of securing, in some other branch of the Public Service, a situation which, if not equally remunerative, will at least not be attended with the same risks to life and health.

Reviewing the whole subject of an efficient executive forest staff for Bengal, it is deserving of consideration whether that staff should not be recruited as far as possible from among the hardier races of Northern and Central India. In corroboration of the remarks here made, a statement is subjoined showing the subsequent forest career of all those Bengalee gentlemen who were sent from this Circle to the Imperial Forest School during the past seven years :—

1. Gour Krishna Sircar; obtained a Forester's certificate in 1886; now a Ranger on Rs. 50; bears a good reputation.
2. Tinkowry Chowdhury; obtained a Ranger's certificate in 1885; resigned in 1890; was uniformly badly spoken of; was unreliable, and probably resigned to avoid dismissal; is now a timber contractor, possessing good private means.
3. Manbir Goorung; obtained a Ranger's certificate in 1887; resigned in 1888; was not considered a good officer.
4. Rakhal Das Mukerjee; obtained a Ranger's certificate in 1885; resigned in 1887; was not considered a good officer.
5. Soshi Bhusan Bhattacharjee; obtained a Forester's certificate in 1888; resigned in 1889; nothing known about him.
6. Nikunja Behari Nandi; obtained a Forester's certificate in 1888; resigned in 1889; bore a good reputation.
7. Nava Kumar Set; obtained a Ranger's certificate with honours in 1888; has been absent on sick leave almost ever since, and is so still.
8. Brindaban Chundra Ghosal; obtained a Ranger's certificate in 1889; not much known about him, either good or bad.

From this it will be seen that of the eight native gentlemen who were sent from this Circle to the Dehra Dun Forest School during the past seven years, and who joined the service in Bengal with Ranger's or Forester's certificates, there are now only three left in the department, and of these three one has been away on sick leave for more than two years—that is to say, almost since he joined. To the Government this arrangement of deputing Bengalee gentlemen to study forestry at the Imperial Forest School has thus proved anything but remunerative, and it is not to be wondered at if Conservators of this Circle should hesitate before sending more men on the same fruitless errand.

2.—General Protection and Breaches of the Forest Law.

23. The total number of new cases brought before the Courts during the year for breaches of the Forest Law was 203, as compared with 120 in the previous year. The percentage of convictions obtained was 87, as compared with 80 in the previous year.

The number of cases disposed of under section 67 of the Forest Act was 1,961, as compared with 2,524 in the previous year.

The number of undetected cases which occurred during the year is given as 6 only, as compared with 35 in the previous year.

The increase in the number of cases brought into Court, and the large decrease in the number of cases compounded, all took place in the Sunderbuns Division. Neither circumstance is explained by Mr. Ellis; but from paragraph 23 of last year's Provincial Report, and from a reference to previous reports, it would appear that the results obtained in 1889-90 were due to abnormal causes. With two Sub-Assistant Conservators attached to the Division, illicit traffic in the Sunderbuns forests ought to be kept sufficiently under control.

3.—Forest Fires.

24. Form 51 attached to this report shows the detailed results of fire-conservancy operations during the year.

It will be seen that 1,464 square miles of reserved forests were under special measures of protection, as compared with 1,217 square miles in the previous year, while the failures amounted to 75 square miles, as compared with 60 square miles in 1889-90. In other words, there was an increase in the specially protected area of 247 square miles, while the percentage of success decreased from 95 per cent. to 91 per cent. The cost of these special measures came to Rs. 10-4 per square mile, as compared with Rs. 11-6 in the previous year.

The area of reserved forests successfully protected from fire during the year without special measures to that end—that is to say, forest tracts growing under natural conditions tending to render fires either impossible, or else preventible by general and inexpensive precautions—amounted to 3,210 square miles, and the cost to Rs. 672. There were no failures deserving of notice under this head, and the balance of the reserved area in this Circle, namely, 515 square miles, is represented by those portions of the Singbhoom reserves that it has not hitherto been seriously attempted to protect. Rupees 78 only are reported to have been expended in this last connection, and half of the area is said to have been saved—a result probably due to the favourable nature of the season.

Summing up the results of the year, 4,857 square miles, or 94 per cent. of the total area of reserved forests in this Circle, escaped fire, while, as regards the remaining area of 332 square miles, there was a failure to protect 75 square miles, and no attempt made to protect 257 square miles.

25. The fires of the season in the specially protected areas were :—

Julpigoree	Division	...	27	square	miles
Angul	,,	...	23	,,	,,
Palamow	,,	...	11	,,	,,
Singbhoom	,,	...	7	,,	,,
Buxa	,,	...	6	,,	,,
Kurseong	,,	...	1	,,	,,

26. The fires in Julpigoree were 17 in number, and burnt portions of six out of the eleven reserves. comprised in the charge. The more serious among these fires swept over one-third of the area of the Apalchand reserve, and burnt nearly the whole of the Muraghat and Goshaihat reserves. Most of these fires are stated to have been wilfully caused, although it is not apparent that any person was caught in the act. On the other hand, the sub-divisional officer concedes that his forests were not properly looked after, that there was sickness among the establishment, and inexperienced hands at work. To the Conservator's own knowledge, again, Mr. Green's state of health did not enable that officer to go into camp during the warm months of the year, and personal experience teaches us what protection to expect when the subordinate establishment is abandoned to its own resources, as appears to have been here only too much the case.

27. The fires in Angul burnt one-third of the Bagmunda reserve, a square mile of the Tikarpara reserve, and 2 square miles of the Kotora reserve. The larger of these fires, which passed over an area of 20 square miles, is attributed by Mr. Richardson to the neglect of the Forester in charge of the Range to carry out the orders issued to him for the protection of his forests. The Conservator was present when the divisional officer first came upon the traces of these fires, of the occurrence of which some time before he

seemed to have been unaware. The Forester was not so much to blame as Mr. Richardson, who had placed him, an untaught member of his office staff, in charge of responsible work that he knew nothing about, and of which he had had no previous experience or subsequent teaching. The fault was not so much that of the subordinate as of the divisional officer himself, who neglected to go about his Division and to take a personal interest in the work of his establishment. It is fortunate that the whole of the Angul reserves were not burnt, as the precautions taken to prevent conflagrations—particularly the spread of fires in the interior of the forests—were unsatisfactory in the extreme.

28. In Palamow there were two fires, the one burning half of the small Chatum reserve (area 855 acres), and the other passing over 7,000 acres, or one-fourth, of the Saidope reserve. Both fires are attributed to incendiarism on the part of persons unknown.

29. The limitation of the protected area in Singbhoom was in accordance with the direction to that end given by Mr. Home, the previous Conservator of this Circle. It is intended next season to attempt the protection of the entire area of the Singbhoom reserved forests. The fire protection rules in force under section 75 (*d*) of the Forest Act for the districts of Darjeeling, Julpigoree, Hazaribagh, Lohardugga, and the Government estate of Angul were only extended to Singbhoom in Notification dated 9th April 1891. In their absence proper fire protection was not to be thought of: the attempt would only have involved waste of money.

The principal fire in Buxa is reported to have been purposely lighted by the department in the Sissoo tract of the Borojhor reserve, with the view to the protection of the surrounding forests. It is not clear why the firing of so large a tract should have been considered necessary.

4.—Grazing and Fencing.

30. Appendix B shows the area of reserved forests in which grazing was permitted during the year. The statement is so far incomplete that the intensity of the grazing is nowhere recorded. The whole of the large area of the Singbhoom reserves is, for instance, shown as open to grazing; but from what the Conservator himself saw, the number of cattle which resort to these forests is, if the Saitba block off Chyebassa be excepted, extremely small, the population being sparse, and possessing ample grazing room in the large area of unclassed forest and waste land lying outside the reserves.

31. In Angul the grasping character of the forest settlement of 1884 left no option but to open the reserves for grazing; but this permission has not hitherto extended to the hot months of the year, and the extensive areas of waste lying outside the reserved forests have, moreover, had the effect of restricting this grazing to the cattle of the villages situated in the interior of the reserves, and on their borders. If the proposals lately submitted to Government by the Conservator are accepted, it should be possible to confine this grazing within defined limits.

32. The Conservator's personal experience shows grazing to be about as injurious to the future of a deteriorated Indian timber forest as are fires themselves, and his endeavour will be to put a stop to the practice pursued in some Divisions of permitting grazing where there is no real necessity for the measure, with the sole object of adding a few rupees to the revenue. Experience in other provinces has shown that where the people have been thus encouraged to look upon the reserved forests as their legitimate grazing grounds, it has been found difficult to put a stop to the practice when there was an urgent call for doing so, the people having in the meantime found it in their interests to keep a number of cattle proportionate to the cheap and excellent pasture provided for them.

Where grazing cannot be otherwise provided for, the reserved forests must accept the pernicious burden as an evil which cannot be helped, as in the case of the Saitba block in Singbhoom, for instance; but to permit the practice under conditions where it can be avoided indicates either professional ignorance, or else indifference to the cultural requirements of the majority of our Indian forests.

5.—Natural Reproduction.

33. It was mentioned in paragraph 63 of last year's report that an experiment would be made during the year in clearing the dense undergrowth of Kibu

(*Strobilanthes pectinatus*), so prevalent in the Darjeeling forests, with the view to encouraging natural tree reproduction. The result is reported to have been excellent, a large number of seedlings—especially Būk and Champ—having sprung up on the cleared sites. It has also to be noticed that there was, during the year, a general flowering and death of the Kibu over large areas, and this circumstance will doubtless tend to give a spurt to tree reproduction during the next three years—the time required for the young Kibu to grow up.

34. Natural tree reproduction is referred to in encouraging terms, with a few exceptions.

In the Teesta forests, and in the protected forests of Khoorda, cattle grazing is said to seriously interfere with the efforts made by Nature in this direction; and in Chittagong early and continuous rains are reported to have been followed by a scanty supply of seed. Personally, the Conservator was much struck by the abundant promise, in the shape of a dense undergrowth of young Sâl of a few feet high, shown by the Singbhoom reserves, and confidently predicts that fifteen years' protection from fires will entirely change the aspect of those forests, and add a hundred-fold to their value. Up to date there have been no serious attempts at fire protection in Singbhoom, and the result is that the bulk of the young Sâl only grow up to be burnt down again. Sâl poles are consequently deficient in number, and a large proportion are crooked and without promise, indicating the nature of their struggle with annually recurring fires—fires rendered fatally destructive to the future of the tree forest by the action of man, who, on agriculture bent, stepped in and provided food for the fires in the shape of countless dead girdled trees, and a thick undergrowth of grass.

6.—Artificial Reproduction and Cultural operations.

35. The detail of these works is shown in Form No. 52.

36. The area of plantations was increased during the year from 3,012 acres to 3,143 acres; and the sum expended on this work and on maintenance was Rs. 6,230, as compared with Rs. 5,898 in the previous year.

The principal plantations are in Darjeeling (1,335 acres), Kurseong (868 acres) and Chittagong (638 acres); and the additions of the year were in Darjeeling (50 acres), Kurseong (61 acres), Chittagong (20 acres).

37. In Darjeeling, the plantations consist of :—

490 acres of tun.	695 acres of oak.	150 acres of bamboo.

During the year 67,458 seedlings were planted out in the Darjeeling plantations, consisting of Champ, Bùk, Pipli, Kawla, Phulat, Walnut, and *Cryptomeria Japonica*. Of these, 38,000 plants were employed to fill vacancies in previously existing plantations.

Over 48 maunds of seed were collected, and the nurseries are still well stocked with seedlings for future use.

The total expenditure under plantations in Darjeeling was Rs. 1,633.

38. In Kurseong, the only important work is the Teak-planted area of Bamonpokri, extending to 477 acres. It looks healthy, but the plantation is an experiment, and no more Teak have been planted out since 1881. The principal operation of the year in Kurseong consisted in transplanting on to an area of 49 acres of the Sukna forest 4,500 plants of Tun and Lampatia. The total expenditure on plantations was only Rs. 175.

39. In Chittagong, the plantations at the commencement of the year consisted of 604 acres of Teak and 14 acres planted with miscellaneous species; and the total expenditure incurred up to date had been Rs. 60,292. During the year the works were extended by 17½ acres planted with Teak and 2½ acres with Rubber (*Ficus elastica*). Vacancies in old plantations were, moreover, filled up by sowing Teak seed at stake in "thallies" 2½′ × 2½′ × 1′ deep and 6′ × 9′ apart. This method of sowing the Teak seed at stake had hitherto proved a failure. It was first tried in 1871-72 at Kassalong, and again in 1888-89 at Sitapahar; but without success. This year each "thallie" was kept carefully weeded and watered till the rains, and the adjoining grass repeatedly cut until the close of the monsoons. Finally, when the seedlings averaged 1 foot in height, vacant "thallies" were supplied with transplants taken from neighbouring "thallies" containing more than one healthy seedling. Countings at the close of the year gave 1,689 plants in 1,748 "thallies."

The divisional officer's report does not clearly set forth the extent to which the old plantations were re-stocked, and it is in the circumstances impossible to gauge the work performed during the year, which, however, involved the very considerable expenditure of Rs. 3,987. He has been desired to explain this expenditure in detail.

40. The cultural operations of the Circle were extended during the year from 999 acres to 1,138 acres, the additions being in Orissa (75 acres), Julpigoree (59 acres), and Darjeeling (2 acres). The cost was Rs. 747, of which Rs. 600 were expended on the up-keep of former works. The principal cultural operations have been situated in Buxa (619 acres), Kurseong (295 acres), and Khoorda (119 acres), while the largest expenditure on this account during the year was in Orissa (Rs. 279) and Darjeeling (Rs. 202).

41. Little or nothing is said by the divisional officers concerning the success of previous years' cultural operations; or rather, they have so mixed up the cultural and plantation work in their reports that it is difficult to separate the one from the other.

42. In Darjeeling, 10,051 plants were put out during the year in the Chongtong, Pograinbong, and Sepoydura blocks.

43. In Orissa, the operations of the year, as shown in the body of the divisional officer's report, were restricted to re-stocking vacancies in the works of previous years, and no explanation is given of the extension recorded in Form 52 in respect to an area of 78 acres in Bichundabhogra (Angul).

44. In Julpigoree, the operations of the year seem to have been confined to some unimportant broadcast sowing of Sâl and Malata seed; apparently attended with indifferent success.

45. The want of method observed in the prosecution of these artificial measures for extending and improving the State forests will only disappear with the subordination of the forest work in each range to the fixed provisions of approved working-plans. Until then the operations executed under this head will derive most of their value from the experience which they are calculated to beget of the requirements of the various species of forest trees in their infant stage of growth.

7.—Experiments and Exotic Trees.

46. In Darjeeling, experiments were continued to test the alleged facility of reproducing the *Cryptomeria Japonica* from cuttings; but the result was so very unfavourable that it is not intended to prosecute the experiment. The species, moreover, is easily reared from seed.

47. In Chittagong, one maund of Padouk seed (*Pterocarpus Indica*) was received from the Andamans, and 9 seers, containing over 10,500 seed, was sown as an experiment in the Kaptai nursery. Only 350 plants came up, and at the close of the year 321 were still alive and healthy (height 2½ feet).

The Mahogany plantation at Babuchat has suffered from the attacks of grubs and borers; but at the close of the year there were 82 trees in the plantation of 1887-88, having an average height of 20 feet, and 106 trees in the plantation of 1889-90, having an average height of 12 feet.

A consignment of 3lb of Mahogany, containing 2,560 seeds, was received from the Royal Botanical Gardens, Calcutta, in March 1891, and sown on the 21st of the same month. Germination set in very profusely 20 days later. Further consignments, aggregating 5lb, were received after the close of the year, and it is expected to put out a large number of Mahogany plants during the rains of 1891, owing to the very successful way in which the seed has germinated—a circumstance attributed by Mr. Heinig to the excellence of the seed supplied, and also in a great measure to the careful preparations that had been made locally to secure the most favourable conditions for success.

48. In the Buxa Division the experiments made to introduce Mahogany have been unsuccessful, and the result is attributed by Mr. Green to the unsuitable climate of the Dooars.

8.—Cutting of Creepers, Cleanings, &c., &c.

49. It is in the Terai forests that creepers are doing most damage to our forests, and the work executed in connection with freeing the trees of these pests seems to have been hitherto very inadequate. Thus only 11,000 acres were

operated on in all three divisions of Kurseong, Buxa, and Julpigoree during the year under review, at a total cost of Rs. 1,424.

In his tour through the Kurseong Terai the Conservator was much struck with the damage done by creepers, and the insignificant attempts hitherto made to improve the condition of the forests in a quarter where improvement is both easily and cheaply effected.

9.—Communications and Buildings.

50. During the year, 6 miles of export road were constructed, and 40 miles of inspection paths made, at a total cost of Rs. 1,186, while 283 miles of export road and 392 miles of inspection paths were repaired at a total cost of Rs. 4,881. The works are not sufficiently important to deserve notice in detail.

The Circle is badly off for export roads, and a new departure is desirable in this respect. In reference to the Teesta forests, Mr. Davis writes:—"In no country are roads more wanted than here. As in Italy every road is "said to lead to Rome, so here every road leads to Kalimpong, and yet there is "not one good road, with the exception of the road from the Teesta bridge to "Kalimpong. What is most urgently required is one good cart road from the "Dooars to Kalimpong. The existing roads running north and south are many, "but it is almost impossible to travel east and west. The department would "find it an advantage to construct a few good cart roads leading up from the "Dooars to the Teesta reserved forests, as they would allow of bamboos and "other produce finding ready purchasers among planters."

There can be no doubt that the subject of communications has been neglected in this Circle. In the important Singbhoom forests a number of cheap roads have been made, but the gradient is so excessive that the money might as well, in many instances, have been thrown away.

51. Coming to buildings, the total expenditure incurred on new works was Rs. 6,851, while Rs. 8,539 were expended in the repair and maintenance of previous constructions.

52. The new works of importance were:—

	Rs.
1. The completion of the Darjeeling fuel depôt (sanctioned in Bengal Government No. 384—57F., dated 3rd February 1890)	2,239
2. The construction of a retaining wall behind the above depôt, rendered necessary by the sinking of the hill side at the back	886
3. The construction of the Kaptai inspection bungalow in Chittagong	1,095
4. The reconstruction of the Ranger's quarters at Sukna (Kurseong)	570

53. Repairs again involved a large expenditure, the more important works being the roofing of the head-quarters' bungalow at Kalimpong with corrugated iron (Rs. 1,069), the roofing of the head-quarters' bungalow at Chybassa (Rs 256), and the roofing of the East Teesta Range quarters (Rs. 270).

CHAPTER IV.—YIELD AND WORKING.

General.

54. The full particulars of the outturn are given in Forms 54 and 55 annexed to the report, while the produce collected in depôt at the commencement of the year, that disposed of from depôt during the year, and that which remained in stock at the close of the year, is shown in Form 56.

55. The total outturn of timber during the year was 8,332,421 cubic feet, as compared with 10,238,808 cubic feet in 1889-90, showing a decrease for the year of 1,906,387 cubic feet. The difference is distributed as follows among the several classes of forest :—

Reserved forests	...	...	—2,035,615 cubic feet.
Protected „	...	...	+ 153,143 „
Unclassed „	...	...	— 23,915 „

56. The total outturn of fuel during the year was, if we except the figures representing free grants, which are necessarily unreliable, 16,597,245 cubic feet, as compared with 15,232,047 cubic feet in 1889-90, showing an increase for the year of 1,365,198 cubic feet. The difference is distributed as follows among the several classes of forest:—

Reserved forests	...	...	— 249,621 cubic feet.
Protected „	...	...	+1,770,387 „
Unclassed „	...	...	— 155,568 „

57. The total number of bamboos extracted during the year was, if we again except the figures representing free grants, 16,525,410, as compared with 15,898,347 in the year 1889-90, showing an increased outturn for the year of 627,063 bamboos. The difference is distributed as follows among the several classes of forest :—

Reserved forests	...	...	+400,118 bamboos.
Protected „	...	...	— 59,575 „
Unclassed „	...	...	+286,520 „

58. The number of cattle that grazed (and paid dues for the same) in the Government forests during the year was 155,615, as compared with 58,756 in 1889-90.

59. The outturn of minor produce (exclusive of bamboos, and grazing is best represented by the value received, which was Rs. 85,664, as compared with Rs. 84,158 in the previous year.

SPECIAL.

1.—Departmental Operations.

(*a*)—*Timber removed departmentally.*

60. The total outturn of timber from departmental operations was 33,536 cubic feet, as compared with 44,173 cubic feet in 1889-90, showing a decrease for the year under report amounting to 10,637 cubic feet. The difference in the outturn of the year is distributed as follows among the several classes of forest :—

Reserved forests	...	...	—11,997 cubic feet.
Protected „	...	...	— 263 „
Unclassed „	...	...	+ 1,623 „

The principal decrease was in Buxa, where, owing to the prevalence of cattle-disease during four or five months of the year, very little timber work could be effected in the forests, either by Government agency or by the purchasers themselves.

(*b*)—*Fuel removed departmentally.*

61. The total outturn of fuel from departmental operations was 463,106 cubic feet, as compared with 438,371 cubic feet in 1889-90, showing an increase in the outturn of the year amounting to 24,735 cubic feet. The difference is distributed as follows among the several classes of forest:—

Reserved forests	...	...	+24,561 cubic feet.
Protected „	...	...	+ 242 „
Unclassed „	...	...	— 68 „

The increase was confined to the Darjeeling reserves, and is attributed to the prohibition practically imposed on the imports of charcoal from Sikkim into the station of Darjeeling.

In the Kurseong and Teesta Divisions the outturn of fuel by departmental agency decreased during the year by 70 per cent. In the case of Teesta this decrease has been met by a still larger increase in the removals by purchasers; but the case is different as regards Kurseong, which shows a considerable and unexplained falling off in both connections, in respect to which the divisional officer has been communicated with.

(c)—Bamboos removed departmentally.

62. The total outturn of bamboos from departmental operations was 456,528, as compared with 619,707 in the previous year, showing a decrease for the year under report amounting to 163,179 bamboos. The difference is distributed as follows among the several classes of forest :—

Reserved forests	...	...	—167,779 bamboos.
Protected „	...	...	Nil.
Unclassed „	...	...	+ 4,600 „

The only important operations under this head have been in Palamow, and it is intended to gradually do away with the system, for which there would seem to be no real necessity.

(d)—Minor Produce removed departmentally.

63. The only case of extracting minor forest produce departmentally was in Singbhoom, where an attempt was made to collect the silk cocoons of the wild Tussur moth, which are found in sufficient numbers inside the reserves on the Sâl and Asan trees. But the operations, entrusted to a trained Dehra Dun Ranger, who resigned the service shortly afterwards, were disgracefully managed, resulting in the cutting down of several thousands of good trees and the collection of 19,519 cocoons only, which realized a net return of Rs. 33. The matter has formed the subject of a separate report to Government.

2.— Removal of Produce by Purchasers.

(a)—Timber removed by purchasers.

64. The total outturn of timber by the agency of purchasers was 8,224,361 cubic feet, as compared with 10,172,896 cubic feet in 1889-90, showing a decrease in outturn for the year under report amounting to 1,948,535 cubic feet. The difference is distributed as follows among the several classes of forest :—

Reserved forests	...	...	—2,018,468 cubic feet.
Protected „	...	...	+ 152,206 „
Unclassed „	...	...	— 82,273 „

The Divisions in which important decreases occurred were the—

Sunderbuns	...	...	—2,094,568 cubic feet.
Chittagong	...	...	— 74,116 „
Buxa	...	...	— 26,411 „
Darjeeling	...	...	— 12,498 „

while the more important increases took place in—

Singbhoom	...	...	+ 178,240 cubic feet.
Kurseong	...	...	+ 42,762 „
Teesta	...	...	+ 23,107 „
Julpigoree	...	...	+ 14,036 „

65. The remarkable decline during the year in the outturn of timber from the Sunderbuns forests has been variously interpreted. It commenced in June 1890, and continued to the end of the year, after which the market commenced to recover itself somewhat. It has been attributed by the divisional officer to the glut of Sundri timber in stock, consequent on excessive exports in the previous two or three years. It is possibly also connected, in a still larger measure, with the tightness of money in the surrounding districts, following upon the inundations of the preceding monsoons. There are not wanting timber merchants indeed who attribute the fall, in part at least, to the increasing difficulty of finding Sundri timber of marketable dimensions and good quality. The impassable character of the jungle, and the presence of man-eating tigers, always have been obstacles to the woodsman in the trackless depths of these litoral forests, and it is not difficult to understand that where the whole area is open from year to year to unrestricted cutting, based on an immense and growing demand for timber and firewood, a period is bound to arrive sooner or later when the time of the timber merchant, or of the men employed by him, will be wasted to an annually increasing extent in laborious explorations for

marketable trees, which, even if they continue to exist in sufficient number to meet the demand, will be found scattered over increasingly wide areas, involving in their discovery an increasing sacrifice of time. If this waste of time has not hitherto affected the outturn in volume of material, it has certainly affected the quality and size of the exports, and in the course of years it is bound to affect the quantity also. As explained by the Conservator in his special report to the Government on the subject, there is only one means of remedying this state of things, and that is to work the Sunderbuns reserves on a system which will tend to concentrate the fellings of each year on fixed areas, which would, thereafter, remain closed sufficiently long to admit of the younger trees coming to maturity. With an arrangement of this kind, which the geographical situation of the Sunderbuns forests should permit of our adopting without serious inconvenience to the people, we should doubtless succeed, within a period of some thirty years, in localising the annual supplies of mature Sundri timber within the known limits of a circle of, say, 50 square miles, instead of this material being spread, as is now the case, over 1,500 square miles of nearly impenetrable jungle.

66. In connection with the falling off in Chittagong the divisional officer writes:—

"This must be ascribed to the increasing difficulty, owing to excessive "and uncontrolled felling in the Unclassed forests, of finding marketable "timber conveniently near to the waterways and to the markets. The "practical extinction of such valuable trees as Jarul, Tun, Gurjan, and "Chikrassi, once abundant in the open forests of the Hill Tracts, is proof "of the destructive agencies at work. Complete security from the raids of "armed Kukis will no doubt stimulate exports for a few years; but the natural "tendency, in spite of any combination of favourable conditions, is for the "exports of timber from the Unclassed Forests and Waste Lands to fall off "year by year, both in quantity and quality, owing to the unrestricted denu-"dation of the forests."

67. The cause of the decrease in Buxa has already been explained as due to the prevalence of cattle-disease, and the mortality among the draught oxen.

68. The fall in the outturn of timber removed by purchasers from the Darjeeling forests has not been satisfactorily explained by the divisional officer; but from the following statement it is not unreasonable to conclude that the demand from the Darjeeling forests in the previous two years had been somewhat in excess of the requirements of the market:—

Removals of timber by purchasers from the Darjeeling forests.

1885-86	...	...	...	... 59,159	cubic feet.
1886-87	...	...	...	... 62,198	„
1887-88	...	...	...	... 92,231	„
1888-89	...	...	...	... 143,843	„
1889-90	...	...	...	... 140,007	„

69. The outturn from the Singbhoom reserves would have been still larger but for the order given by the Conservator to put a stop to the system in force under which the purchasers had been hitherto permitted to select the best and the most accessible Sâl trees at a fixed rate of Rs. 10 per tree (trees containing 150 cubic feet of timber). The Conservator has since then had 3,000 Sâl trees of mature dimensions marked in three separate localities (1,000 trees in each locality), and with a view to inviting competition, and to securing the market value of the timber, is now about to advertise the sale of these trees on tender. This number of trees is estimated to represent the normal outturn of the Singbhoom reserves in green mature Sâl timber, and will be adhered to year by year until a proper working-plan shall have been prepared for those forests.

(b)—Fuel removed by purchasers.

70. The total outturn of fuel by purchasers was 16,134,139 cubic feet, as compared with 14,793,676 cubic feet in 1889-90, showing an increase for the year under report of 1,340,463 cubic feet. The difference is distributed as follows among the several classes of forest:—

Reserved Forests	...	...	...	— 274,182	cubic feet.
Protected „	...	...	...	+ 1,770,145	„
Unclassed „	...	...	...	— 155,000	„

71. The Divisions in respect to which important increases are recorded in the outturn of fuel by purchasers are:—

Orissa	..	...	...	+	817,803 cubic feet.
Teesta	...	...	...	+	115,598 „
Sunderbuns	...	...	...	+	1,013,992 „

while the Divisions prominent for a falling of in this respect were—

Julpigoree	...	...	...	—	348,703 cubic feet.
Kurseong	...	...	...	—	121,588 „
Singbhoom	...	...	...	—	95,257 „

72. The large increase in the outturn from the Orissa forests is not altogether reliable, having been roughly calculated on the extended issue, during the year, of 4-anna house licenses to the ryots of the Khorda Government estate in respect to their use of the protected forests of that subdivision.

73. The large decrease in the outturn of fuel by purchasers from the Julpigoree reserves has not been explained by the divisional officer, who has been communicated with on the subject. It is observed, at the same time, that the outturn of the year was 75 per cent. better than that of 1888-89, and a still greater improvement on the results of 1887-88; while from the observations made in last year's report it would appear that the outturn for 1889-90 had been exceptionally high.

74. The unaccountable decrease in Kurseong under this head has been referred to further back (paragraph 61).

The outturn of that Division during the past five years has been as follows:—

				C. ft.
1886-87	...	...	...	150,864
1887-88	...	...	...	154,686
1888-89	...	...	...	301,886
1889-90	...	...	...	215,343
1890-91	...	...	...	93,755

75. The decrease in the outturn of fuel by purchasers in Singbhoom was confined to the unclassed forests, that from the reserved forests having doubled itself in the same period.

(*c*)—*Bamboos removed by purchasers.*

76. The total number of bamboos removed by purchasers during the year was 16,068,882 as compared with 15,278,640 in 1889-90, showing an increase in the outturn of the year under report amounting to 790,242. The difference is distributed as follows among the several classes of forest:—

				No.
Reserved Forests	...	...	...	+ 567,897
Protected „	...	...	...	— 59,575
Unclassed „	...	...	...	+ 281,920

77. Increased outturns of importance were effected in the case of the following Divisions:—

				No.
Chittagong	...	...	...	+ 407,097
Orissa	...	...	...	+ 277,422
Darjeeling	...	...	...	+ 50,601
Singbhoom	...	...	...	+ 43,485
Hazaribagh	...	...	...	+ 34,334

while the only decrease of importance occurred in Kurseong.

(*d*)—*Minor produce removed by purchasers.*

78. It is impossible to represent in figures the sum total of the outturn of minor forest produce, which has to be recorded in cubic feet, in maunds, or in numbers, according to the nature of the produce; while in certain cases it has been only found possible to record the value. Full particulars will be found in Form No. 55 annexed to the report. For present purposes it will be sufficient to state that the value of minor forest produce removed during the year by purchasers amounted to Rs. 84,396, as compared with Rs. 82,842 in the previous year.

3.—Free Grants.

79. The quantity of forest produce exported during the year in the form of free grants is estimated to have been as follows: the figures of the previous year being also given for purposes of comparison:—

	1890-91.	1889-90.
	C. ft.	C. ft.
Timber (Reserved Forests)	10,980	16,130
„ (Protected „)	3,269	2,069
„ (Unclassed „)	60,275	3,540
Total timber ...	74,524	21,739
Fuel (Reserved Forests)	1,014,449	1,002,149
„ (Protected „)	2,500,000	3,500,000
„ (Unclassed „)	.....	.....
Total fuel ...	3,514,449	4,502,149
	No	No.
Bamboos (Reserved Forests)	50	21,140
„ (Protected „)	3,860,640	3,302,000
„ (Unclassed „)	3,000	3,000
Total bamboos ...	3,863,690	3,326,140
	Rs.	Rs.
Minor produce (Reserved Forests)	1,718	2,377
„ (Protected „)	57,340	49,271
„ (Unclassed „)	60	8
Total ...	59,118	51,656

80. The large increase in the grants of timber from unclassed forests occurred in Singbhoom, on the requisition of the Deputy Commissioner, for public purposes

81. The apparently large grant of fuel remarked in the case of the reserved forests is intended to represent the concessions enjoyed by the 220 villages situated off the Saitba block, near Chybassa, in Singbhoom: the figures, like all other data of the kind, are unreliable.

CHAPTER V.—FINANCIAL RESULTS.

82. The financial results of the year compare as follows with those of the previous three years:—

Year.	Receipts.	Charges.	Surplus.
	Rs.	Rs	Rs.
1887-88	6,57 794	3,90,368	2,67,426
1888-89	6,76,907	3,75,471	3,01,436
1889-90	7,68,718	3,90,265	3,78,453
1890-91	7,27,392	4,04,288	3,23,104

The surplus of the year was thus Rs. 55,349 less than that for the previous year; but Rs. 21,668 in excess of the surplus for 1888-89, and Rs. 55,678 in excess of that for 1887-88. The proportion of surplus to gross revenue was 44·4, as compared with 49·2 in the previous year.

83. The revenue was realised from the following sources:—

	1890-91.	1889-90.
	Rs.	Rs.
Timber	3,27,716	3,86,355
Fuel	2,18,692	2,08,259
Bamboos	48,256	45,728
Grazing	11,425	11,079
Minor forest produce	85,664	84,158
Confiscations	16,789	11,970
Miscellaneous	18,850	21,169
	7,27,392	7,68,718

During the year increases of revenue took place under—

	Rs.
Firewood and charcoal	10,433
Bamboos	2,528
Grazing	346
Minor forest produce	1,507
Confiscated	4,819
Total ...	19,633

while decreases took place under—

	Rs.
Timber	58,639
Miscellaneous	2,320
Total ...	60,959

Balance against the year = Rs. 41,326.

84. The following statement shows the expenditure of the year compared with that of the previous year:—

Budget Heads.	1890-91.	1889-90.	Increase.	Decrease.
A.—Conservancy and Works.	Rs.	Rs.	Rs.	Rs.
I.—Timber and other produce removed from the forests by Government agency	50,720	51,371	...	651
II.—Timber and other produce removed from the forests by consumers and purchasers	41,209	35,671	5,538	...
III.—Drift and waif wood and confiscated forest produce	4,642	3,268	1,374	...
VI.—Live and dead stock	13,234	19,370	...	6,136
VII.—Communications and buildings	21,658	21,594	64	...
VIII.—Demarcation, improvement, and extension of forests	32,212	32,273	...	61
IX.—Miscellaneous	9,636	4,723	4,913	...
Total A—Conservancy and Works ...	1,73,311	1,68,270	11,889	6,848
B.—Establishment.				
I.—Salaries	1,90,404	1,82,561	7,843	...
II.—Travelling allowances	31,447	31,441	6	...
III.—Contingencies	9,125	7,993	1,132	...
Total B—Establishment ...	2,30,976	2,21,995	8,981	...
Grand Total of Expenditure ...	4,04,287	3,90,265	20,870	6,848
Net Increase ...	...	...	14,022	...

85. The expenditure thus increased by Rs. 14,022, the increases of importance occurring under—

	Rs.
A II	5,538
A IX	4,913
B I	7,843

The increase under A II was due to more extensive repairs to boats and steamers in the Sunderbuns Division, which came to Rs. 8,035, against Rs. 3,227 in the previous year.

The increase under A IX includes the following items:—

	Rs.
1. Written off the sum misappropriated by the late Officiating Ranger, Mr. Miller (see paragraph 22 of the report) ...	970
2. Ditto ditto revenue stolen from the Kassalong Range, Chittagong (*see* paragraph 22 of this report) ...	2,201
3. Refunds of revenue; increase during the year	491
4. Rewards for the discovery of forest offences; increase during the year	872
Total ...	4,531

86. The following statement shows the receipts and expenditure of the several Divisions during the year, with financial results; the figures of the previous year being given for purposes of comparison:—

Division.	Receipts.		Charges.		Surplus.		Deficit.	
	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction ...	4,993	5,819	33,715	30,876	...	...	28,722	25,057
Darjeeling ..	69,708	61,800	78,847	60,925	10,921	14,375	...	...
Kurseong ...	17,745	16,963	23,896	28,235	...	...	6,151	9,272
Teesta ...	21,588	18,975*	15,713	19,513	5,876	...	...	538
Julpigoree ...	31,098	24,635	19,933	19,600	12,005	5,029	...	...
Buxa ...	23,358	31,206	27,879	26,604	...	4,632	4,521	...
Sunderbuns ...	4,10,483	4,55,458	77,711	78,004	3,32,772	4,06,794	...	...
Chittagong ...	92,250	73,039	38,765	32,510	43,485	40,529	...	...
Orissa ...	12,005	9,929	29,631	27,535	...	...	17,026	17,006
Singbhoom ...	26,009	9,668	22,459	25,343	3,550	...	...	15,675
Palamow ...	4,434	8,048	15,411	17,755	...	...	10,977	9,707
Hazaribagh ...	1,945	1,588	3,269	3,704	...	...	1,324	2,116
Cossye (Drift) ...	216	...	...	...	216	...	...	...
Working-Plan ..	...	...	17,000	13,135	...	...	17,000	13,135
Total ...	7,27,302	7,66,718	4,04,228	3,90,265	4,08,885	4,71,359	85,781	92,906

87. In connection with the financial status of the Darjeeling Division attention is invited to Dr. Schlich's able memorandum of 1882 on the subject. Referring to the fuel-supply question, Dr. Schlich expounded that the net profits to be realised by Government in view of making the forests pay should not be less than Rs. 7 per 100 maunds of firewood supplied, and he added that means must be devised to obtain that royalty. "There is no reason," says Dr. Schlich, "why the price of firewood in Darjeeling should be a fixture. As "the working advances further from Darjeeling, and the expenditure increases, "the price should be raised accordingly. The fact that fuel was cheap while it "could be obtained close to the station, and while the demand was limited, does "not prevent a rise in the price now that it has to be brought from a considerable "distance. In connection with this it should be remembered that (as far as the "information at my disposal shows) firewood is cheaper at Darjeeling than at "any other Indian hill stations."

According to Dr. Schlich, the department was losing in 1880-81 with a net surplus of Rs. 3-12 per hundred maunds of firewood supplied, but this surplus has sunk since then very considerably, and if the Darjeeling Division is to show a proper balance between expenditure and revenue, it will be necessary to increase the current rates for fuel supplied to the station of Darjeeling.

88. The Singbhoom Division has for the first time shown a surplus from the present year; that surplus promises to be an important one.

89. Deficits are shown in the case of the Kurseong, Buxa, Orissa, Palamow, and Hazaribagh forests. In regard to the Buxa forests, the cause was an exceptional one and has already been explained. In regard to the other Divisions, it is at least satisfactory to note that the position is not quite as bad as formerly. We are confronted with two difficulties in the case of the majority of Bengal forest charges. The first is that so many of the forests had been already exhausted before they came under the management of the Forest Department; and the second is that the reserved forests are frequently surrounded by other forests, which either belong to private persons, who have no interest in keeping them up and every interest in cutting them down, or else to Government, which has then set them apart for the free, or practically free, use of the people. A time will doubtless come, and is advancing rapidly in some cases, when the people will only have the State reserves to fall back upon. For the present it should therefore be a subject for congratulation that the reserved forests can be given that rest and improvement which they so much need, without inconvenience to the people, and with such little pecuniary loss to the State. In the case of Orissa, indeed, which is the Division showing the largest deficit, it rests with the Government to alter the financial position of the forest charge entirely, should it think fit to do so, by adding to the almost nominal fees now paid by the ryots of Khorda for their use of the protected forests—or at least by making the ryots of Angul pay as much as their brethren in Khorda for the unrestricted use by the former of the woodlands lying outside the reserved area.

90. The value of live and dead stock at the end of the year was Rs. 2,18,163, as compared with Rs. 2,05,759 at the commencement of the year.

91. The amount of revenue outstanding at the close of the year was Rs. 175, as compared with Rs. 874 at the commencement of the year.

CHAPTER VI.—GENERAL REMARKS.

92. During the year Mr. E. J. N. James, Sub-Assistant Conservator, was ordered to report on the Sissoo avenues of the Poosa Government estate in Durbhunga, with the result that a scheme of management has been introduced which provides for the present stock of over-mature trees being removed gradually, but at the same time as rapidly as is compatible with their replacement by young trees, and with the preservation of the avenues.

93. All members of the subordinate executive and protective staffs were supplied with uniforms during the year for the first time.

94. The health of the establishment was not good.

Form No. 49.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1890-91.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Darjeeling.	Senchal	Darjeeling district.	Senchal	3,380	5	...	...	3,389	5	9th July 1890*	* Declared reserved from 15th August 1890.
	Mahalderam		Mahalderam	4,130	7	7	...	4,143	7		
	Tukdah		Tukdah	7,509	12	...	...	7,500	12		
	Goompahar		Goompahar	9,245	14	...	...	9,245	14		
	Singalila		Singalila	41,254	64	...	...	41,254	14		
			Total	65,513	102	7	...	65,540	102		
Teesta.	West Teesta	Ditto	Rangit	3,663	6	...	...	3,663	6		
			Mangwa	995	1½	...	...	995	1½		
			Raiang	4,084	6	...	...	4,084	6		
			Sitong	6,416	10	...	...	6,416	10		
			Swoke Hills	6,664	10½	...	...	6,664	10½		
	East Teesta	Ditto	Rilli	5,287	8	...	...	5,287	8		
			Kalimpong	7,350	11½	...	...	7,350	11½		
			Dumsong	14,032	22	...	...	14,032	22		
			Rissoom	5,830	9	...	...	5,830	9		
			Loolagaon	8,239	13	...	...	8,239	13		
	Pankasari	Ditto	Pankasari	9,809	16	...	...	9,809	16		
			Rhenock	3,225	5	...	...	3,225	5		
			Richila	10,644	17	...	...	10,644	17		
			Mo[illegible]	4,453	7	...	...	4,453	7		
			Jaldaka	14,874	23	...	...	14,874	23		
			Nar	10,093	15½	...	...	10,093	15½		
			Dalmkot	6,561	10	...	...	6,561	10		
			Mal	5,493	8½	...	...	5,493	8½		
	Chel	Ditto	Mongpong	6,230	10	...	...	6,230	10		
			Leesh	4,287	7	...	...	4,287	7		
			Gosh	13,730	21	...	...	13,730	21		
			Noam	7,867	12	...	5	7,862	12	24th November 1890.	
			Total	159,926	250	...	5	159,921	250		
Kurseong.	Eastern	Ditto	Dhobijhora	589	1	...	...	589	1		
			Babukhola	1,840	3	...	...	1,840	3		
			Sivakhola	408	1	...	...	408	1		
			Pagajhora	35				35			
			Sukna	4,353	7	...	...	4,353	7		
			Mahanadi	4,533	7	...	...	4,533	7		
			Champasari	3,063	5	...	...	3,063	5		
			Chokiong	10,144	16	...	...	10,144	16		
			Latpanchor	3,405	5	...	...	3,405	5		
			Sivoke	4,623	7	...	...	4,623	7		
	Western	Ditto	Manjua	1,112	2	...	...	1,112	2		
			Koohein	514	1	...	...	514	1		
			Manjha	4,078	6	...	...	4,078	6		
			Mechi	3,152	5	...	...	3,152	5		
			Bolasan	1,761	3	...	...	1,761	3		
			Tukriajhar	1,304	2	...	...	1,304	2		
			Dalkajhar	5,820	9	...	...	5,820	9		
			Pantapari	2,600	4	...	...	2,640	4		
			Bamanpokri	1,372	2	...	...	1,372	2		
			Rakti	195	1	...	...	195	1		
			Lamaguuba	488				488			
			Total	55,530	87	...	...	55,539	87		
Julpigori.	Apalchand	Julpigori district.	Apalchand	18,861	30	...	...	18,861	30		
	Tondu	Ditto	Tondu	54,460	85	...	...	54,460	85		
	Muraghat	Ditto	Muraghat	31,003	48	...	...	31,003	48		
	Talakata	Ditto	Dulgaon	1,375	2	...	...	1,375	2		
			Dunchi	3,062	5	...	...	3,002	5		
			Khairbari	1,775	3	...	...	1,775	3		
			Teeti	7,795	12	...	...	7,795	12		
			Salbari	12	...	...	...	12	...		
			Total	118,343	185	...	...	118,343	185		
Buxa.	Borojhor	Ditto	Borojhor	35,200	55	...	...	35,200	55		
			Butri	1,400	2	...	...	1,400	2		
			Gabur Basra	6,400	10	...	...	6,400	10		
			Salkaer	1,100	2	...	...	1,100	2		
	Buxa	Ditto	Buxa	92,507	145	...	...	92,507	145		
	Haldibari	Ditto	Raidak	12,800	20	...	...	12,800	20		
			Dhumpara	7,040	11	...	...	7,040	11		
			Bholka	12,800	20	...	...	12,800	20		
			Total	169,247	265	...	...	169,247	265		

Note.—All the forests in the Darjeeling and Julpigori districts originally declared to be Reserved under section 34 of the Act in the Notification of 23rd January 1879, together with certain areas since added to them and declared Reserved Forests under section 19, were regazetted as proposed Reserves in Notification, dated 4th February and 19th August 1890, respectively, and the resettlement of these forests is still proceeding (see paragraph 4 of the previous year's report).

FORM No. 49—continued.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1890-91—concluded.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification or transfer.	Remarks.
Palamow.	Northern ...	Lohardugga district.	Kechki	440	1	...	...	440	1		
			Betlah	6,847	10	...	...	6,847	10		
			Saidope	27,520	43	...	...	27,520	43		
			Tungari	5,715	9	...	...	5,715	9		
			Ramundag	10,880	17	...	...	10,880	17		
			Kumandi	8,960	14	...	...	8,960	14		
			Chatum	855	1	...	...	855	1		
			Peeroo	1,523	3	...	...	1,523	3		
			Ooreeya	608	1	...	...	608	1		
	Southern ...	Ditto ...	Seemah	26,240	41	...	...	26,240	41		
			Barasand	30,711	48	...	...	30,711	48		
			Total ...	120,389	188	...	...	120,389	188		
Singbhoom. Direction.	Ranchi ...	Ditto ...	Horhap	1,098	2	...	...	1,098	2		
	Koderma ...	Hazaribagh district.	Koderma	29,767	46	...	...	29,767	46		
			Total ...	30,865	48	...	...	30,865	48		
Singbhoom.	Saranda ...	Singbhoom district.	Saranda	201,110	314	...	...	201,110	314		
	Chyebassa ...		Do.	64,640	101	...	...	64,640	101		
	Kolhan ...		Do.	69,120	108	...	...	69,120	108		
	Porahat ...		Porahat	132,480	207	...	...	132,480	207		
			Total ...	467,350	730	...	...	467,350	730		
Sunderbuns.	Satkhira ...	Khulna ...	Sunderbuns	244,480	382	...	...	244,480	382		
	Khulna ...			447,353	699	...	...	447,353	699		
	Bagirhat ...			320,000	500	...	3,967	316,033	494	15th August 1890.	
			Total ...	1,011,833	1,581	...	3,967	1,007,866	1,575		
Chittagong.	Kassalong ...	Chittagong Hill Tracts.	Kassalong	488,320	763	...	...	488,320	763		
	Sitapahar ...		Sitapahar	7,020	11	...	...	7,020	11		
	Matamori ...		Matamori	160,640	251	...	...	160,640	251		
	Sungoo ...		Sungoo	93,190	145	...	...	93,190	145		
	Rhinkheong ...		Rhinkheong	137,570	215	...	...	137,570	215		
			Total ...	886,740	1,385	...	...	886,740	1,385		
Angul.	Tikarpara ...	Tributary Mehals of Orissa.	Tikarpara	103,040	161	...	...	103,040	161		
	Bagmundi ...	Ditto ...	Bagmundi	40,960	64	...	...	40,960	64		
	Durgapur ...	Ditto ...	Durgapur	35,200	55	...	...	35,200	55		
			Total ...	179,200	280	...	...	179,200	280		
Pooree.	Dandimal ...	Pooree ...	Dandimal	28,329	44	...	...	28,329	44		
	Khorda ...		Khorda	2,960	5	...	...	2,960	5		
	Banpur ...		Dandimal	1,854	3	...	...	1,854	3		
	Kuhuri ...		Banpur	20,601	32	...	...	20,601	32		
			Kuhuri	6,400	10	...	...	6,400	10		
			Total ...	60,144	94	...	...	60,144	94		
			GRAND TOTAL ...	3,325,000	5,195	7	3,973	3,321,044	5,189		

FORM No. 49.

FOREST DEPARTMENT, BENGAL.

Area of Protected Forests 1890-91.

Sunderbuns.	Diamond Harbour.	24-Pergunnahs district.	Diamond Harbour	340,731	533	...	1,653	339,078	530	3rd Sept. 1890
			Barlporo	205,686	321	...	...	205,686	321	
	Basirhat ...	Ditto ..	Basirhat	645,386	1,008	...	1,322	644,064	1,006	29th July ,,
	Satkhira ...	Khulna district.	Satkhira	15,360	24	...	...	15,360	24	
	Khulna ...		Khulna	16,119	25	...	16,119	...	...	14th Aug. ,, 3rd Sept. ,, 1st Dec. ,, 3rd Feb. 1891
			Total ...	1,223,282	1,911	...	19,094	1,204,128	1,881	
Pooree.	Dandimal ...	Pooree district.	Dandimal	48,602	76	...	...	48,602	76	
	Khorda ...		Khorda	82,901	130	...	...	82,901	130	
	Banpur ...		Banpur	61,687	96	...	...	61,687	96	
	Kuhuri ...		Kuhuri	16,618	26	...	...	16,618	26	
			Total ...	209,808	328	...	...	209,808	328	
			GRAND TOTAL ...	1,433,090	2,239	...	19,094	1,413,936	2,209	

FORM No. 49—*concluded.*

FOREST DEPARTMENT, BENGAL.

Unclassed State Forests and Waste Lands, 1890-91.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1890. Acres.	Area on 1st April 1890. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1891. Acres.	Area on 31st March 1891. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Chittagong...		Chittagong Hill Tracts	Hill Tracts, unclassed State forests.	2,581,420	4,034	...	...	2,581,420	4,034	.....	Under the general management of the department for the collection of revenue—area unknown.
Singbhoom...		Singbhoom district.	Waste lands	...	...	...	...	...	...		

FORM No. 50.

FOREST DEPARTMENT, BENGAL.

Register of Breaches of Forest Rules during 1890-91.

Division.		Cases pending from 1889-90.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.	Disposed of during the year. Convictions. Cases.	Convictions. Persons.	Acquittals. Cases.	Acquittals. Persons.	Total. Cases.	Total. Persons.	Cases pending at close of year.
Darjeeling	A	2	...	8	9	1	18	20	18	21	2	4	20	25	...
	B	...	1	197	226	8	432	432	430	510	2	3	432	522	...
	C	...	3	...	...	...	3	3	...	...	...	...	...	...	...
	Total ...	2	4	205	235	9	453	455	448	540	4	7	452	547	...
Teesta	A	...	...	1	1	...	2	2	1	3	...	...	1	3	1
	B	...	5	30	33	1	78	78	78	82	...	...	78	82	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	5	40	34	1	80	80	79	85	...	...	79	85	1
Kurseong...	A	...	...	3	2	6	11	11	10	16	1	1	11	17	...
	B	...	...	24	21	4	49	49	49	53	...	...	49	53	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	...	27	23	10	60	60	59	69	1	1	60	70	...
Julpigori	A	1	3	4	...	1	8	9	4	8	2	4	6	12	3*
	B	...	1	19	11	2	33	33	33	48	...	...	33	48	...
	C	...	1	1	...	...	2	2	...	...	...	...	...	...	...
	Total ...	1	5	24	11	3	43	44	37	56	2	4	39	60	3
Buxa	A	1	3	...	1	...	3	4	4	10	...	...	4	10	...
	B	...	...	4	5	2	11	11	11	31	...	...	11	31	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	1	3	4	6	2	14	15	15	41	...	...	15	41	...
Palamow	A	...	3	...	...	...	3	3	3	3	...	...	3	3	...
	B	...	...	1	1	...	2	2	2	2	...	...	2	2	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	3	1	1	...	5	5	5	5	...	...	5	5	...
Direction	A	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	B	...	...	4	...	...	4	4	4	6	...	...	4	6	...†
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	...	4	...	...	4	4	4	6	...	...	4	6	...

N. B.—A means cases taken into court.
B means cases disposed of under section 67 of the Indian Forest Act, 1878
C means undetected cases.
* Four persons.
† Includes the late Hazaribagh subdivision.

FORM No. 50—*concluded.*

FOREST DEPARTMENT, BENGAL.

Register of Breaches of Forest Rules during 1890-91—concluded.

Division.		Cases pending from 1889-90.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
			Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
									Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Singbhoom	A	...	...	1	...	...	1	1	1	3	...	...	1	3	...
	B	...	...	18	3	1	22	22	22	71	...	...	22	71	...
	C	...	1	...	...	...	1	1	...	...	...	...	...	...	...
	Total ...	...	1	19	3	1	24	24	23	74	...	...	23	74	...
Sunderbuns	A	1	...	20	...	111	131	132	54	67	6	9	60	76	72*
	B	...	...	202	...	1,013	1,215	1,215	1,215	1,215	...	...	1,215	1,215	...
	C	...	...	...	...	...	...	..	...	...	...	...	...	...	...
	Total ...	1	...	222	...	1,124	1,346	1,347	1,269	1,282	6	9	1,275	1,291	72
Chittagong	A	1	...	... 4	...	1	1	2	2	2	...	...	2	2	...
	B	...	...	...	...	...	4	4	4	10	...	...	4	10	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	1	...	4	...	1	5	6	6	12	...	...	6	12	...
Angul	A	1	...	1	2	...	3	4	3	5	1	9	4	14	...
	B	...	...	28	17	...	45	45	45	71	...	...	45	71	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	1	...	29	19	...	48	49	48	76	1	9	49	85	...
Peoree	A	2	...	10	2	10	22	24	17	42	6	15	23	57	1
	B	...	...	43	20	3	66	66	66	90	...	...	66	90	...
	C	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	2	...	53	22	13	88	90	83	132	6	15	89	147	1
GRAND TOTAL ...	A	9	8	48	17	130	203	212	117	180	18	42	135	222	77
	B	...	7	563	337	1,034	1,941	1,941	1,950	2,198	2	3	1,961	2,201	...
	C	...	5	1	...	...	6	6	...	...	...	...	...	...	...

N.B.—A means cases taken into court.
B means cases disposed of under section 67 of Indian Forest Act, 1878.
C means undetected cases.
* Seventy-two persons.

FORM No. 51.

FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from Fire during the dry season 1891, *to accompany Report for* 1890-91.

Division.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 31st May 1890.	During dry season of 1891.			Cost during the season up to 31st May 1891.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
	I.—Areas protected by isolation and other special measures.		Acres.	Acres.	Acres.	Acres.	Rs.	
Teesta ...	West Teesta Range—							
	Ranjit forest	1881-82	3,663	3,663	...	3,663	140	
	Mangwa do.	1881-82	995	995	...	995	45	
	Raiang do.	1885-86	3,901	4,084	...	4,084	50	
	Sitong do.	1879-80	6,416	6,416	...	6,416	50	
	Sivoke hills do.	1879-80	6,664	6,664	...	6,664	47	
	East Teesta Range (part)—							
	Rilli forest	1879-80	5,287	5,287	...	5,287	112	
	Kalimpong do.	1885-86	7,310	7,350	3	7,347	120	
	Pankasari Range (part)—							
	Jaldaka forest	1881-82	14,874	14,874	...	14,874	67	
	Nar do.	1881-82	10,093	10,093	...	10,093	73	
	Dalingkot do.	1881-82	6,561	6,561	...	6,561	71	
	Mal do.	1881-82	5,493	5,493	...	5,493	144	
	Chel Range—							
	Mungpong forest	1879-80	6,214	6,230	28	6,202	90	
	Leesh do.	1879-80	4,287	4,287	...	4,287	55	
	Geesh do.	1879-80	13,732	13,730	...	13,730	148	
	Noam do.	1879-80	7,867	7,862	...	7,862	77	
	Total ...	...	103,347	103,589	31	103,558	1,289	

FORM No. 51—*continued.*

FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from Fire during the dry season 1891, *to accompany Report for* 1890-91—continued.

DIVISION.	FOREST TRACTS.	Year in which protection commenced.	Area actually protected up to 31st May 1890.	DURING DRY SEASON OF 1891.			Cost during the season up to 31st May 1891.	REMARKS.
				Area attempted to be protected.	Failures.	Actually protected.		
	I.—*Areas protected by isolation and other special measures*—concluded.		Acres.	Acres.	Acres.	Acres.	Rs.	
Kurseong ...	Eastern Range (part)—							
	Sukna forest	1876-77	4,243	4,358	...	4,358	629	
	Mohanadi do.	1876-77	1,033	4,533	...	4,533	19	Expended on special protection of Siligori rain-tree plantation.
	Champasari do.	1876-77	3,063	3,063	...	3,063	227	
	Chocklong do.	1876-77	10,144	10,144	...	10,144	105	
	Latpanchar do.	1876-77	3,405	3,405	...	3,405	44	
	Sivoke do.	1876-77	4,623	4,623	...	4,623	11	
	Western Range (part)—						301	
	Manjua forest	1882-83	1,112	1,112	...	1,112	75	
	Manjha do.	1879-80	4,048	4,078	...	4,078	153	
	Mechi do.	1884-85	3,044	3,152	473	2,679	303	
	Balasan do.	1884-85	1,761	1,761	...	1,761	133	
	Tukriajhar do.	1882-83	1,364	1,364	...	1,364	102	
	Dalkajhar do.	1878-79	5,795	5,820	...	5,820	660	
	Patnapari do.	1878-79	2,000	2,000	...	2,000	301	
	Bamanpokri do.	1876-77	1,372	1,372	...	1,372	248	
	Rakti do.	1876-77	195	195	...	195	88	
	Lamagumba do.	1876-77	479	488	...	488	58	
	Total ...	...	48,375	52,153	473	51,680	3,557	
Julpigori ..	Apalchand Range	1878-79	15,601	19,861	6,888	11,973	392	
	Tondu do.	1878-79	54,112	54,460	...	54,460	580	
	Muraghat Range—							
	Dainah forest	1881-82	14,570	15,360	1,320	14,040	72	
	Muraghat do.	1872-73	10,170	10,880	7,650	3,230	136	
	Rehti do.	1881-82	2,923	2,923	...	2,923	49	
	Goshainhat do.	1881-82	1,660	1,840	1,000	840	68	
	Falakata Range—							
	Dulgaon forest	1879-80	975	1,375	100	1,275	86	
	Dumchi do.	1879-80	2,562	3,062	120	2,942	117	
	Khairbari do.	1882-83	1,772	1,775	...	1,775	35	
	Teesti do.	1882-83	6,795	7,795	...	7,795	37	
	Salbari do.	1882-83	12	12	...	12	65	
	Total ...	...	111,152	118,343	17,078	101,265	1,637	
Buxa	Borojhar Range—(part)							
	Borojhar forest—							
	Sál tract	1879-80	19,824	19,840	50	19,790	551	* Burnt by the department with the view to protecting other areas.
	Sissu do.	1890-91	.	15,380	2,880*	12,480		
	Butri forest	1883-89	1,400	1,400	..	1,400	117	
	Salkuer do.	1883-84	1,100	1,100	..	1,100	101	
	Buxa Range (part) ...	1876-77	72,342	72,347	...	72,347	1,569	
	Haldibari range – (part)							
	Raidak forest—							
	Sál tract	1882-83	7,500	7,500	600	6,900	300	
	Sissu do.	1890-91	...	5,300	...	5,300		
	Bholka forest	1877-78	12,600	12,800	...	12,800	151	
	Total ...	...	114,766	135,647	3,530	132,117	2,788	
Palamow ...	Northern Range—							
	Kechki forest ...	1879-80	440	440	...	440		
	Betlah do. .. .	1879-80	6,847	6,847	...	6,847		
	Sandope do.	1879-80	24,000	27,520	7,040	20,480		
	Tumari do.	1880-81	5,715	5,715	...	5,715		
	Ramandag do.	1879-80	5,880	10,880	...	10,880		
	Kumandi do.	1879-80	5,760	8,960	..	8,960	438	
	Chatum do.	1885-86	855	855	427	428		
	Peeree do.	1885-86	1,523	1,523	...	1,523		
	Oreeya do.	1885-86	698	698	...	698		
	Southern Range—							
	Seemah forest ..	1879-80	25,232	26,240	...	26,240	327	
	Barasand do.	1879-80	30,151	30,711	...	30,711		
	Total ...	...	98,091	120,389	7,467	112,922	765	
Direction ...	Koderma forest	1879-80	26,600	29,767	...	29,767	187	Includes the late Hazaribagh subdivision.
Singbhoom ..	Chyebasa range	1884-85	...	64,640	1,374	63,266	430	In dry season of 1890 these areas were protected by less extensive measures.
	Kolhan range (part) ...	1884-85	...	24,320	3	24,317	203	
	Porahat do. (do.) ...	1890-91	...	48,040	2,600	45,440	165	
	Total ...	...	...	137,000	4,577	133,023	807	
Angul ...	Tikarpara range	1884-85	103,040	103,040	550	102,490	810	(a) Includes 60 acres burnt in dry season of 1890, but not then reported.
	Bagmunda do.	1884-85	40,920	40,960	13,060 (a)	27,900	355	
	Durgapur do.	1884-85	35,200	35,200	1,280	33,920	752	
	Total ...	...	179,160	179,200	14,890	164,310	1,917	
Khorda ...	Dandimal range	1885-86	28,317	28,329	...	28,329	1,051	
	Khorda do.	1885-86	4,814	4,814	...	4,814	288	
	Banpur do.	1885-86	18,799	20,601	...	20,601	539	
	Kuhuri do.	1885-86	6,400	6,400	...	6,400	229	
	Total ...	...	58,330	60,144	...	60,144	2,107	
	Total Head I ...	...	739,891	936,832	48,046	888,786	15,054	

FORM No. 51—*concluded.*

FOREST DEPARTMENT, BENGAL

Area of Forest Tracts protected from Fire during the dry season 1891, *to accompany Report for* 1890-91—concluded.

DIVISION.	FOREST TRACTS.	Year in which protection commenced.	Area actually protected up to 31st May 1890.	DURING DRY SEASON OF 1891.			Cost during the season up to 31st May 1891.	REMARKS.
				Area attempted to be protected.	Failures.	Actually protected.		
	II.—Areas protected by less extensive measures and by rules.		Acres.	Acres.	Acres.	Acres.	Rs.	
Darjeeling ...	Senchal range	1881-82	3,389	3,389	...	3,389	1	
	Mahalderam do.	1881-82	4,139	4,141	2	4,141	...	
	Tukdah do.	1881-82	7,509	7,509	...	7,509	...	
	Goompahar do.	1881-82	9,245	9,245	...	9,245	...	
	Singalila do.	1882-83	41,133	41,254	..	41,254	46	
	Total ...	...	65,415	65,540	2	65,538	47	
Teesta ...	East Teesta Range (part)—							
	Dumsong forest	1881-82	14,032	14,032	...	14,032	68	
	Rissoom do.	1881-82	5,826	5,830	...	5,830	87	
	Loolagaon do.	1881-82	8,239	8,239	...	8,239	105	
	Pankasari Range (part)—							
	Pankasari forest	1881-82	9,807	9,809	...	9,809	40	
	Rhenock do.	1881-82	3,225	3,225	...	3,225	...	
	Rechi La do.	1881-82	10,644	10,644	...	10,644	123	
	Mo do.	1881-82	4,453	4,453	...	4,453	...	
	Total ...	...	56,226	56,232	...	56,232	423	
Kurseong ...	Eastern Range (part)—							
	Dhobijhora forest	1882-83	581	589	...	589	34	
	Rabukhola do.	1882-83	1,840	1,840	...	1,840	44	
	Silakhola do.	1882-83	408	408	...	408	7	
	Paglajhora do.	1885-86	35	35	...	38	5	
	Western Range (part)—							
	Koohein forest	1882-83	514	514	...	514	10	
	Total ...	...	3,378	3,386	...	3,384	100	
Buxa ...	Borojhar Range (part) ...	1890-91	...	6,400	...	6,400	46	
	Haldibari do. (do.) ...	1890-91	...	7,040	...	7,040	56	
	Total ...	...	...	13,440	...	13,440	102	
Direction ...	Ranchi Range—							
	Horhap forest	1886-87	1,098	1,098	...	1,098	...	
	Total Head II ...	...	126,116	139,696	2	139,694	672	
	III.—Areas protected without any special measures.							
Buxa	Buxa Range (part)—							
	Hill forest	1890-91	...	20,160	...	20,160	...	
Sunderbuns ..	Satkhira range	1890-91	...	244,480	...	244,480	...	
	Khulna do.	1890-91	...	447,353	...	447,353	...	
	Bagirhat do.	1890-91	...	316,033	...	316,033	...	
	Total ...	...	...	1,007,866	...	1,007,866	...	
Chittagong ...	Kassalong range	1890-91	...	488,320	...	488,320	...	
	Sitapahar do.	1890-91	...	7,020	...	7,020	...	
	Matamori do.	1890-91	...	160,640	...	160,640	...	
	Sungoo do.	1890-91	...	98,190	...	98,190	...	
	Rinkheong do.	1890-91	...	187,570	...	187,570	...	
	Total ...	...	...	886,740	...	886,740	...	
	Total Head III... ...	...	...	1,914,766	...	1,914,766	...	

FORM No. 52.

FOREST DEPARTMENT, BENGAL.

Area of Plantations, 1890-91.

DIVISION.	Name of Plantation.	AREA IN ACRES. On 1st April 1890.	Added during the year.	Excluded during the year.	Area on 31st March 1891.	Receipts of the year.	Charges of the year.	REMARKS.
	Regular Plantations.					Rs.	Rs.	
Darjeeling	Senchal Range—							
	Rungbul block	281	...	...	281	...	28	
	Dooteria do.	305	2	...	307	...	307	
	Rangnu do.	139	...	...	139	...	55	
	Tukdah Range—							
	Rangirun block	41	42	...	83	...	539	
	Poonong do.	205	...	...	205	125	278	
	Goompahar Range—							
	Tungsong block	104	3	...	107	5	188	
	Goom do.	150	...	...	150	...	30	
	Nai do.	...	3	...	3	...	204	
	Total ...	1,285	50	...	1,335	130	1,633	
Kurseong	Dhobijhora block	13	...	...	13	...	...	
	Ditto compartments 5 & 6	23	...	...	23	...	...	
	Ditto ditto 1 to 4	27	12	...	39	...	84	
	Bamonpokri forest	477	...	...	477	...	...	
	Sukna block	7	...	...	7	...	...	
	Siligori plantation	12	...	...	12	...	...	
	Chamta block, compartment 5	2	...	...	2	...	...	
	Ditto, ditto 1	115	...	...	115	...	...	
	Ditto, ditto 3	54	...	...	54	...	...	
	Kynaunka block, ditto 2	25	...	...	25	...	...	
	Ditto, ditto 3	...	40	...	40	...	91	
	Adalpur ditto 2	52	...	...	52	...	...	
	Total ...	807	61	...	868	...	175	
Julpigori	Falakata	3	...	...	3	...	...	
Chittagong	Pahartalli	5	...	...	5	...	...	
	Sitapahar	613	20	...	633	...	3,987	
	Total ...	618	20	...	638	...	3,987	
Pooree	Barunai Hill	276	...	...	276	...	372	
	Chandmari	15	...	...	15	...	35	
	Santrapur	8	...	...	8	...	28	
	Total ...	299	...	...	299	...	435	
	Total Regular Plantations ...	3,012	131	...	3,143	130	6,230	
	Cultural Operations.							
Darjeeling	Mahalderam Range—							
	Sepoydura block	24	...	...	24	...	125	
	Goompahar Range—							
	Chongtong block	1	2	...	3	...	77	
	Pograinbong ,, ...	1	...	...	1	...	...	
	Total ...	26	2	...	28	...	202	
Teesta	West Teesta Range—							
	Seem block	2	...	...	2	...	...	
Kurseong	Dhobijhora block	210	...	...	210	...	45	
	Chamta do.	11	...	...	11	...	23	
	Sukna do.	2	...	...	2	...	1	
	Champasari do.	...	...	...	...	...	11	
	Harlia do.	10	...	...	10	...	...	
	Tukriajhar do.	1	...	...	1	...	...	
	Rakti do.	53	...	...	53	...	...	
	Miscellaneous	8	...	...	8	...	...	
	Bamonpokri Lama Gumba ...	...	...	...	...	...	13	
	Khairbani	...	...	...	...	...	5	
	Total ...	295	...	...	295	...	98	
Julpigori	Guzliduba and Rajadanga blocks	...	10	...	10	...	5	
	Chengmari block	...	10	...	10	...	2	
	Lower Tondu do.	14	6	...	20	...	5	
	Murachat do.	...	20	...	20	...	23	
	Dumchi do.	...	10	...	10	...	6	
	Dianah do.	...	3	...	3	...	...	
	Total ...	14	59	...	73	...	41	

FORM No. 52—*concluded.*

FOREST DEPARTMENT BENGAL.

Area of Plantations, 1890-91—concluded.

DIVISION.	Name of Plantation.	AREA IN ACRES. On 1st April 1890.	Added during the year.	Excluded during the year.	Area on 31st March 1891.	Receipts of the year.	Charges of the year.	REMARKS.
	Cultural Operations—concluded.					Rs.	Rs.	
Buxa ...	Rajabhatkawa block—							
	Compartment 25	19	...	...	19	...	90	
	Ditto 26	511	...	...	511	...		
	Ditto 24	1	...	...	1	...		
	Ditto 21	47	...	...	47	...		
	Ditto 23	19	...	...	19	...		
	Ditto 15	1	...	...	1	...		
	Poro block	21	...	...	21	...		
	Buxa reserve	...	...	...	...	...	15	
	Borojhar forest	...						
	Salkuer do.	...						
	Haldibari do.	...						
	Total ...	619	...	...	619	...	105*	
Palamow ...	Range head-quarters	...	...	...	...	...	10	For the maintenance of Mahogany plants in Northern Range, and 20 devi devi plants within the bungalow compound, &c.
Angal ...	Tikarpara	2	78	...	80	...	30	
Pooree ...	Chandka block—							
	Dhobabundh	13	...	...	13	...	75	
	Ghosaripara	2	...	...	2	...	12	
	Bhatunkiparia	2	...	...	2	...	12	
	Compartment 9	12	...	...	12	...	73	
	Churang block—							
	Compartment 6	5	...	...	5	...	40	
	Ditto 8	7	...	...	7	...	48	
	Total ...	41	78	...	119	...	260	
	Total of Cultural Operations ...	909	139	...	1,138	...	747	
	GRAND TOTAL ...	4,011	270	...	4,281	130	6,977*	

* Rs. 1 48 (Rs. 76 in Kurseong, Rs. 4 in Teesta, Rs. 31 in Chota Nagpur, Rs. 16 in Hazaribagh, and Rs. 15 in Singbhoom) have not been accounted for in this return.

FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Outturn (in cubic feet, solid) of Timber and Fuel during the year 1890-91, *and Agency of Exploitation.*

Division.	Timber in the rough; Logs.					Timber in the rough; Poles.					Sawn or squared Timber.					Miscellaneous.					Fuel.					Total.
	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Government.	Purchasers.	Free grantees.	Right-holders.	Total.	Outturn.
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
I.—RESERVED FORESTS.																									
Darjeeling Division ...	...	116,179	...	...	116,179	...	11,330	950	...	12,280	1,053	...	..	...	1,053	...	..	...	...	...	498,130	260,758	...	...	668,888	798,399
Teesta ditto ..	..	116,722	...	...	116,722	.	4,305	...	...	4,305	.	...	..	...	..	...	17	...	...	17	12,600	265,556	..	...	278,156	399,200
Kurseong ditto ...	167	126,306	...	...	126 473	2,712	5,934	...	...	8,646	376	...	...	...	376	...	...	...	...	...	8,829	93,755	.	...	102,584	238,079
Julpigori Subdivision ...	2,178	24,380	...	...	26,538	1,052	54,717	...	...	55.769	.	...	...	...	...	...	...	..	...	..	10,286	385,277	2,284	...	397,847	480 154
Buxa ditto ..	290	33,233	...	...	33,523	477	45,525	30	...	46,032	38	...	...	...	38	...	50	...	...	50	...	3,571	..	...	3,571	83 214
Hazaribagh ditto ...	...	..	...	...	..	...	388	..	...	388	..	...	...	...	.	...	96	..	..	96	...	10,405	..	...	10,405	10,889
Singhbhoom ditto ...	..	162,600	..	...	162,600	270	41,445	...	...	41,715	273	...	...	...	273	..	...	10,000*	...	10,000	3,664	109,111	1,000,000	...	1,112,775	1,327 363
Sunderbuns Division ...	208	4,696,804	...	...	4,697,012	11	2,040,640	.	...	2,040,651	...	...	...	...	...	925	...	...	...	925	...	9,586,360	...	...	9,586,360	16,324,948
Chittagong ditto ...	309	...	...	...	309	1,242	1,798	.	...	3,040	...	..	...	...	...	...	.	...	...	...	...	..	.	...	.	3,349
Orissa ditto ...	1,714	...	...	...	1,714	.	1,286	.	...	1,286	...	...	..	...	..	...	4,731	...	..	4,731	..	67,525	13,165	...	79,690	87,421
Total ...	4,866	5,276,204	...	...	5,281,070	5,764	2,207,368	980	...	2,214,112	1,739	...	.	...	1,739	925	4,894	10,000	...	15,819	443,509	10,732,318	1,014,449	...	12,240,276	19,753,016
II.—PROTECTED FORESTS.																									
Sunderbuns Division ...	...	75,432	...	...	75,432	...	323,288	...	...	323,288	...	...	...	...	...	125	...	...	...	125	242	1,947,736 (a)	... (b)	...	1,947,978	2,346,823
Orissa ditto ...	...	.	...	...	...	...	2,101	3,269	...	5,370	...	...	.	...	...	...	...	...	...	..	...	3,111,360	2,500,000	...	5,611,360	5,617,230
Total	...	75,432	.	...	75,432	...	325,389	3,269	..	328,658	..	.		..	...	125	...	...	..	125	242	5,059,096	2,500,000	...	7,559,338	7,964,053
III.—UNCLASSED FORESTS.																									
Direction Division .	..	..	..	...	...	...	...	...	...	...	...	...	...	...	...	14,963	...	...	...	14,963	18,993	.	...	...	18,993	(c) 33,956
Singbhoom Ditto .	.	83,300	57,000	...	90,300	..	18,825	2,895	...	21,120	..	...	...	...	...	.	...	...	...	.	87	59,615	...	...	59,702	171,122
Chittagong Ditto ..	3,309	60,916	380	...	64,596	161	29,929	.	...	30,090	47	30,103	...	...	30,150	1,647	162,601	...	...	164,248	275	232,610	...	...	232,885	521,969
Kus Drift ditto	.	.	.	...	..	...	.	...	...	.	...	...	...	...	...	(d)	..	...	...	..	..	..	..	...	.	.
Total ...	3,309	94,216	57,380	...	154,896	161	48,154	2,895	...	51,210	47	30,103	...	...	30,150	16,619	162,601	.	..	179,211	183,592	292,225	...	...	311,580	727,047

* Estimated 220 privileged villages.

(a) 15,405 house licenses under commutation system. Estimated 3,061,600 c. ft. included. Under executive order of Government Revenue credited under major head II.

(b) 2,500,000 c. ft. Estimated to have been removed, free of charge, by distressed people.

(c) Bengal share of Gundnick drift.

(d) 27 pieces were seized, out of which 23 were of the previous year, but not shown in that year's return, cubic contents, unknown.

FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1890-91.

Divisions.	Description of Produce.	Produce removed or utilised. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
	RESERVED FORESTS.											
Darjeeling.	Fodder—											Ie, Rs. 9
	Coolie loads (464) ... ... Mds.	464	7	...	...	10	...	...	...	474	7	Outstanding realised .. 8
	Bamboo rhizom (8) ... ... ,,	8	2	...	...	...	...	...	...	8	2	Total Ie, .. 17
	Making bamboos ... ... No.	...	...	2,400	12	...	...	...	...	2,400	12	IIc, 435
	One-month mat-makers' permits ,, for ditto (873).	...	...	523,800	416	...	...	...	...	523,800	416	Realised on account of last year... 2
	Compensation realised for illicit ,, cutting.	...	...	85	5	...	...	...	...	85	5	Total IIc, .. 437
	Fodder—											
	Coolie loads (344) ... ... Mds.	...	...	344	5	...	...	...	...	344	5	
	One month permits (3,817) ... ,,	...	...	114,510	1,324	...	...	...	...	114,510	1,324	
	Compensation realised for coolie ,, loads (153).	...	...	153	138	...	...	...	...	153	138	
	Compensation realised for lop- ,, ping (20).	...	...	20	144	...	...	...	...	20	144	
	Grazing—											
	One-month permits for cows ... No.	...	...	3,674	1,837	...	...	...	...	3,674	1,837	
	Ditto ditto bullocks ,,	...	...	394	197	...	...	...	...	394	197	
	Ditto ditto ponies ... ,,	...	...	2	1	...	...	...	...	2	1	
	Three-month permits for cows ... ,,	...	...	753	559	...	...	...	...	753	559	
	Ditto ditto buffaloes ,,	...	...	42	47	...	...	...	...	42	47	
	Ditto ditto sheep ... ,,	...	...	1,714	321	...	...	...	...	1,714	321	
	Compensation realised for graz- ing—											
	Cows ... ... No.	...	...	390	558	...	...	...	...	390	558	
	Bullocks ... ... ,,	...	...	164	341	...	...	...	...	164	341	
	Buffaloes ... ... ,,	...	...	11	18	...	...	...	...	11	18	
	Calves ... ... ,,	...	...	25	19	...	...	...	...	25	19	
	Sheep ... ... ,,	...	...	30	8	...	...	...	...	30	8	
	Ponies ... ... ,,	...	...	37	56	...	...	...	...	37	56	
	Goats and kids ... ... ,,	...	...	30	14	...	...	...	...	30	14	
	Cows ... ... ,,	...	...	7	} 40	...	...	...	...	7	} 40	
	Calves ... ... ,,	...	...	11		...	...	...	...	11		
	Bullocks ... ... ,,	...	...	1		...	...	...	...	1		
	Colt and mare ... ... ,,	...	...	2	3	...	...	...	...	2	3	
	Compensation miscellaneous ... ,,	...	...	...	5	...	...	...	...	...	5	IId, Rs. 5,635.
	India-rubber ... ... Mds.	...	...	4	64	...	...	...	...	4	64	
	Aconite root ... ... ,,	...	...	67	50	...	...	...	...	67	50	
	Cane coolie loads (34) ... ... ,,	...	...	34	11	...	...	...	...	34	11	
	Do. monthly permits (28) ... ,,	...	...	840	108	...	...	...	...	840	108	
	Compensation realised for 16 coolie loads, cane.	...	...	10	11	...	...	...	...	10	11	
	Moss (151 baskets) ... ... ,,	...	...	129	32	22	5	...	...	151	37	
	Bamboo roots (19 coolie loads)... ,,	...	...	20	5	...	...	...	...	20	5	
	Fencing sticks (1 coolie load) ... ,,	...	...	1	...	...	...	...	...	1	...	
	Compensation realised for bam- ,, boo root (1 coolie load).	...	...	1	1	...	...	...	...	1	1	
	Ferns ... ... ,,	...	...	12	6	...	...	...	...	12	6	
	Honeycomb (40) ... ... ,,	...	...	4	40	...	...	...	...	4	40	
	Seedlings, various (6,200)... ,,	...	...	2,600	130	3,600	190	...	...	6,200	320	
	Manure, coolie loads (100) ... ,,	...	...	100	6	...	...	...	...	100	6	
	Creeper ditto (4) ... ,,	...	...	4	1	...	...	...	...	4	1	
	Chiretta ditto (7) ... ,,	...	...	7	3	...	...	...	...	7	3	
	Khaguti ditto (20) ... ,,	...	...	20	5	...	...	...	...	20	5	
	Compensation realised for illicit removal of stone (3 bits) ... c. ft.	...	...	1	1	...	...	...	...	1	1	
	Stone ... ... ,,	...	...	...	...	14,000	70	...	...	14,000	70	IIe, Rs. 534. Free grants Rs. 265.
Tests.	Bamboos ... ... No.	...	...	132,517	1,229	50	1	...	...	132,567	1,230	
	Compensation for illicit cut- ,, ting.	...	...	280	9	...	...	...	...	280	9	II c, Rs. 1,238. Free grant Re. 1.
	Fodder—											
	One-month permits (880) ... Mds.	...	...	17,970	150	...	...	...	...	17,970	150	
	Coolie loads (3,049) ... ,,	...	...	3,049	48	...	...	...	...	3,049	48	
	Compensation for illicit re- ,, moval, 11 coolie loads.	...	...	11	7	...	...	...	...	11	7	
	Compensation for illicit lop- ,, ping 2 trees.	...	...	4	15	...	...	...	...	...	15	
	Grazing—											
	One-month permits for buffaloes No.	...	...	1,560	585	...	...	...	...	1,560	585	
	Ditto ditto bullocks ,,	...	...	617	77	...	...	...	...	617	77	
	Ditto ditto cows ... ,,	...	...	3,386	423	...	...	...	...	3,386	423	
	Ditto ditto ponies... ,,	...	...	44	6	...	...	...	...	44	6	
	Ditto ditto goats ... ,,	...	...	78	10	...	...	...	...	78	10	
	Three-month permits for buffa- ,, loes.	...	...	425	106	...	...	...	...	425	106	
	Ditto ditto bullocks ,,	...	...	17	2	...	...	...	...	17	2	
	Ditto ditto cows ... ,,	...	...	3,291	411	...	...	...	...	3,291	411	
	Ditto ditto ponies... ,,	...	...	32	4	...	...	...	...	32	4	
	Ditto ditto sheep ... ,,	...	...	4	...	...	...	...	...	4	...	
	Compensation for illicit grazing—											
	Buffaloes ... ... No.	...	...	109	85	...	...	...	...	109	85	
	Bullocks ... ... ,,	...	...	4	3	...	...	...	...	4	3	
	Cows ... ... ,,	...	...	201	108	...	...	...	...	201	108	
	Calves ... ... ,,	...	...	8	4	...	...	...	...	8	4	
	Ponies ... ... ,,	...	...	2	1	...	...	...	...	2	1	
	Goats ... ... ,,	...	...	60	15	...	...	...	...	60	15	
	Sheep ... ... ,,	...	...	0	3	...	...	...	...	0	3	II d, Rs. 2,063.

FORM No. 55—*continued.*

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1890-91—continued.

Division.	Description of Produce.	Produce removed or utilised. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
	RESERVED FORESTS—*continued.*											
Tents—*concluded.*	Thatch grass (coolie loads 800) ... Mds.	...	...	800	12	...	...	...	...	800	12	
	Cane (ditto 202) ... ,,	...	...	202	131	...	...	...	...	202	131	
	Lime stone ... ... ,,	...	...	100	25	...	...	...	...	100	25	
	Lime confiscated ... ... ,,	...	...	400	100	...	...	...	...	400	100	
	Plantain leaves (coolie loads 6)... ,,	...	...	6	2	...	...	...	...	6	2	
	Barla do. (ditto 32)... ,,	...	...	32	8	...	...	...	...	32	8	
	Palm do. (ditto 54)... ,,	...	...	54	13	...	...	...	...	54	13	
	Kabai do. (ditto 109)... ,,	...	...	109	40	...	...	...	...	109*	40	* Includes 52 loads removed without permit for which compensation has been realised.
	Kabra do. (ditto 2)... ,,	...	...	2	1	...	...	...	...	2	1	
	Broom grass (ditto 15)... ,,	...	...	15	4	...	...	...	...	15	4	
	Odal bark (ditto 1)... ,,	...	...	1	1	...	...	...	...	1	1	
	Orchids (ditto 1)... ,,	...	...	4	2	...	...	...	...	4	2	
	Clay (ditto 108)... ,,	...	...	108	3	...	...	...	...	108	3	II *e*, Rs. 342.
Kurseong.	Maling bamboos ... ... No.	...	...	2,100	10	...	...	...	...	2,100	10	
	Filling do. ... ... ,,	...	...	1,500	8	...	...	...	...	1,500	8	
	Hill do. ... ... ,,	...	...	23,657	1,066	...	...	...	...	23,657	1,066	
	Permit fees for making baskets... ,,	...	...	400	25	...	...	...	...	400	25	
	Compensation ... ... ,,	...	...	122	25	...	...	...	...	122	25	II *c*, Rs. 1,134.
	Fodder—											
	Coolie loads ... ... Mds.	...	...	481	8	272	4	...	...	753	12	
	One-month permits, 817 ... ,,	...	...	24,510	408	...	...	...	...	24,510	408	
	Elephant load, one-monthly permit. ,,	...	...	180	3	...	...	...	...	180	3	
	Compensation for fodder, 1 load ,,	...	...	1	1	...	...	...	...	1	1	
	Ditto lopping tree leaves. ,,	...	...	1	1	...	...	...	...	1	1	
	One month permits for grazing—											
	Cows ... ... No.	...	...	797	289	...	...	...	...	797	289	
	Bullocks ... ... ,,	...	...	232	43	...	...	...	...	232	43	
	Buffaloes ... ... ,,	...	...	423	211	...	...	...	...	423	211	
	Compensation for illicit grazing—											
	Cows ... ... No.	...	...	53	41	...	...	...	...	53	41	
	Bullocks ... ... ,,	...	...	5	5	...	...	...	...	5	5	
	Buffaloes ... ... ,,	...	...	101	98	...	...	...	...	101	98	
	Goats ... ... ,,	...	...	21	7	...	...	...	...	21	7	
	Calves... ... ... ,,	...	...	5	4	...	...	...	...	5	4	II*d*, Rs. 1,119. Free grant Rs. 4.
	Thatch grass... ... ... ,,	...	...	8,293	241	...	...	...	...	8,293	241	
	Broom grass ... ... ,,	...	...	4	1	...	...	...	...	4	1	
	Barla leaves ... ... ,,	...	...	1	1	...	...	...	...	1	1	
	Bamboo roots ... ... ,,	...	...	2	1	...	...	...	...	2	1	
	Inferior seedlings ... ... No.	...	...	28	5	...	...	...	...	28	5	
	Tree ferns ... ... Mds.	...	...	...	...	32	8	...	...	32	8	
	Plantain leaves ... ... ,,	...	...	1	...	...	...	...	...	1	...	
	Hatipania grass ... ... ,,	...	...	30	7	...	...	...	...	30	7	
	Stones ... ... C. ft.	...	...	14,000	70	...	...	...	...	14,000	70	
	Sands, 4 carts ... ... Mds.	...	...	40	1	...	...	...	...	40	1	
	Gravels, 20 carts ... ... ,,	...	...	200	1	...	...	...	...	200	1	
	Canes ... ... ,,	...	...	27	73	...	...	...	...	27	73	
	Compensation for broom grass ... ,,			6	6	...	...	...	...	6	6	
	Ditto on plantain leaves ,,	...	...	1	1	...	...	...	...	1	1	
	Ditto for fishing ... ... ,,	...	...	...	2	...	...	...	...	...	2	IIe. Rs. 410 Free grant Rs. 8
Jalpiguri.	Bamboos ... ... No.	...	...	1,350	17	...	...	...	...	1,350	17	II*c*, Rs. 17.
	One-month permits for grazing—											
	Buffaloes ... ... No.	...	...	1,291	323	...	...	...	...	1,291	323	
	Cows ... ... ,,	...	...	143	18	...	...	...	...	143	18	
	Compensation for illicit grazing—											
	Buffaloes ... ... No.	...	...	196	206	...	...	...	...	196	206	
	Cows ... ... ,,	...	...	48	24	...	...	...	...	48	24	II*d*, Rs 571.
	Thatch grass, coolie load ... Mds.	...	...	14,048	219	...	...	...	...	14,048	219	
	Khagra grass ditto ... ,,	...	...	956	27	145	5	...	...	1,101	32	
	Gaicha leaves, monthly permits (28). ,,	...	...	840	56	...	...	...	...	840	56	
	Long pepper monthly permits (13). ,,	...	...	13	26	...	...	...	...	13	26	
	Compensation for removing cane, coolie loads without permit. ,,	...	...	20	5	...	...	...	...	20	5	IIe, Rs. 313. Free grant Rs. 5.
Buxa.	Bamboos ... ... No.	...	...	275	3	...	...	...	...	275	3	IIe, Rs. 3.
	Grazing—											
	One-day permits for outside elephants. No.	...	...	42	21	...	...	...	...	42	21	
	One-day permits for Commissariat elephants. ,,	...	...	578	72	...	...	...	...	578	72	
	One-month permits for buffaloes ,,	...	...	1,038	401	...	...	...	...	1,038	401	
	Ditto for cows ... ,,	...	...	22	3	...	...	...	...	22	3	
	Compensation for illicit grazing—											
	Buffaloes ... ... No.	...	...	90	88	...	...	...	...	90	88	
	Cows ... ... ,,	...	...	2	...	...	...	...	...	2	...	II*d*, Rs. 585.
	Thatch grass, loads... ... ... Mds.	...	...	4,951	77	...	...	...	...	4,951	77	
	Khagra ditto ... ... ,,	...	...	44	1	...	...	...	...	44	1	
	Gaicha leaves, loads ... ... ,,	...	...	43	3	...	...	...	...	43	3	
	Cane, loads ... ... ,,	...	...	6	1	...	...	...	...	6	1	
	Jack fruits, No. 76 ... ... ,,	...	...	8	3	...	...	...	...	8	3	
	Lime ... ... ,,	...	...	100	25	...	...	...	...	100	25	
	Compensation for illicit removal of lime. ,,	...	...	50	50	...	...	...	...	50	50	IIe, Rs. 160.

FORM No. 55—*continued.*

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1890-91—continued.

Division.	Description of Produce.	Produce removed or utilised.										Remarks.
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			Rs.		Rs.		Rs.		Rs.		Rs.	
		RESERVED FORESTS—*continued.*										
Palamow.	Bamboos ... ... No.	428,078	2,140*	11,005	34	...	...	...	...	439,083	2,174	*Ic*, Rs. 3,745.
	Illicit cutting of bamboos ... ,,	...	...	2	1	...	...	...	...	2	1	IIc, Rs. 30.
												Approximate value, 581,881 bamboos were sold for Rs 3,745.
	Grazing—											
	One-month permits for—											
	Buffaloes ... ... ,,	...	...	5,243	328	...	...	...	...	5,243	328	
	Calves ... ... ,,	...	...	845	26	...	...	...	...	845	26	
	Cows ... ... ,,	...	...	901	28	...	...	...	...	901	28	
	Two-month permits for—											
	Buffaloes ... ... ,,	...	...	641	80	...	...	...	...	641	80	
	Calves ... ... ,,	...	...	89	6	...	...	...	...	89	6	
	Cows ... ... ,,	...	...	43	3	...	...	...	...	43	3	
	Illicit grazing of calves ... ... ,,	...	...	32	1	...	...	...	...	32	1	IId, Rs. 472.
	Khur grass ... ... Mds.	...	...	720	11	...	...	...	...	720	11	
	Sabai grass ... ... ,,	...	...	32	1	...	...	...	...	32	1	
	Mohwa flowers ... ... ,,	...	...	4	3	...	...	...	...	4	3	
	Rent of trees—											
	Mohwa 235, (estimated) ... ... ,,	...	...	470	59	...	...	...	...	470	59	
	Paras, 1 (do.) ... ... ,,	...	...	...	1	...	...	...	...	...	1	
	Mango, 12 (do.) ... ... ,,	...	...	60	6	...	...	...	...	60	6	
	Kusum, 29 (do.) ... ... ,,	...	...	2	10	...	...	...	...	2	10	IIe, Rs. 91.
Hazaribagh.	Bamboos ... ... No.	...	...	57,615	432	...	...	...	...	57,615	432	
	Compensation for illicit felling of bamboos. ,,	...	...	85	2	...	...	...	...	85	2	IIc, Rs. 434.
	Fodder—											
	One-month permits, 213 ... Mds.	...	...	6,390	27	...	...	...	...	6,390	27	
	Grazing—											
	One-year permits for grazing—											
	Buffaloes ... ... No.	...	...	76	38	...	...	...	...	76	38	
	Bullocks ... ... ,,	...	...	49	12	...	...	...	...	49	12	
	Cows ... ... ,,	...	...	72	18	...	...	...	...	72	18	
	One-month permits for grazing—											
	Buffaloes ... ... ,,	...	...	113	7	...	...	...	...	113	7	
	Bullocks ... ... ,,	...	...	394	6	...	...	...	...	394	6	
	Cows ... ... ,,	...	...	216	3	...	...	...	...	216	3	
	Fifteen-day permits for bullocks ,,	...	...	6	1	...	...	...	...	6	1	IId, Rs. 112.
	Cocoons ... ... Mds.	*	42	...	...	...	...	...	...	...	42	* Stock for 1889-90.
	Thatch grass ... ... ,,	...	...	2,213	41	...	...	...	...	2,213	40	
	Khur ,, ... ,,	...	...	4	1	...	...	...	...	4	1	
	Sabai ,, ... ,,	...	...	4,000	350	...	...	...	...	4,000	350	
	Chope fibre ... ... ,,	...	...	8	1	...	...	...	...	8	1	
	Fencing thorns ... ... ,,	...	...	2,204	10	...	...	...	...	2,204	10	
	Jack fruits ... ... ,,	...	...	9	1	...	...	...	...	9	1	
	Khejur leaves ... ... ,,	...	...	10	1	...	...	...	...	10	1	
	Peer fruits ... ... ,,	...	...	32	2	...	...	...	...	32	2	
	Koynor leaves ... ... ,,	...	...	24	1	...	...	...	...	24	1	
	Leaves for plates ... ... ,,	...	...	40	1	...	...	...	...	40	1	
	Hurra ... ... ,,	...	...	20						20		
	Aorah ... ... ,,	...	...	10	24	...	...	...	...	10	24	
	Bohera ... ... ,,	...	...	12						12		
	Mohua flowers ... ... ,,	...	...	150	100	...	...	...	...	150	100	
	,, fruits ... ... ,,	...	...	65						65		
	Rent of kusum trees (56) for laying lac. ,,	...	...	8	8	...	...	...	...	8	8	
	Rent of 93 mica mines, estimated yield in maunds. ,,	...	...	6,812	691	...	...	...	...	6,812	690	Ie, Rs. 42. IIe, Rs. 1,339.
Singbhoom.	Bamboos ... ... No.	4,418	44†	75,200	143	...	...	...	...	79,618	187	† Approximate value; 8 669 bamboos were sold for Rs 54 Ic, Rs. 54.
	Grazing—											
	One-month permits for—											
	Buffaloes ... ... No.	...	...	88,440	184	...	...	...	...	88,440	184	IIc (part) Rs. 143.
	Cows and bullocks ... ... ,,	...	...	7,080	7	...	...	...	...	7,080	7	
	Compensation for illicit grazing of buffaloes. ,,	...	...	118	18	...	...	...	...	118	18	IId, Rs. 209.
	Iron ores	...	...	...	7	...	...	...	...	...	7	
	Slate stone	...	...	...	26	...	...	...	...	...	26	
	Brushwood	...	...	...	18	...	...	...	...	...	18	
	Hurra	...	...	...	10	...	...	...	...	...	10	
	Sabai grass	...	...	...	612	...	...	...	...	...	612	
	Thatch grass	...	...	...	49	...	...	...	...	...	49	
	Leaves	...	...	...	4	...	...	...	...	...	4	
	Chope fibre	...	...	...	12	...	...	...	...	...	12	Ie, Rs. 533.
	Silk cocoons ... ... No.	19,519	533	13,140	148	...	...	...	...	32,659	681	IIe (part) Rs. 1,531.
	Compensation for ditto ... ... ,,	...	...	158	5	...	...	...	...	158	5	
	Prospecting lease for minerals ...	...	...	...	640	...	...	...	...	...	640	
Sonda-burra.	Goipatha ... ... Mds.	...	...	3,427,904	53,561	...	...	...	...	3,427,904	53,561	
	Shella ... ... ,,	...	...	50,432	788	...	...	...	...	50,432	788	
	Null ... ... ,,	...	...	240,640	3,760	...	...	...	...	240,640	3,760	
	Hental ... ... ,,	...	...	12,416	194	...	...	...	...	12,416	194	
	Ora leaves ... ... ,,	...	...	896	14	...	...	...	...	896	14	
	Cane ... ... ,,	...	...	1,600	25	...	...	...	...	1,600	25	IIe (part) Rs. 60,166.
	Wax and honey ... ... ,,	1	...	3,648	1,824	...	...	...	...	3,649	1,824	

FORM No. 55—*continued.*

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1890-91—continued.

Division.	Description of Produce.	Produce removed or utilised. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
	RESERVED FORESTS—*concluded.*											
Chittagong.	Kalisurry bamboos	...	...	3,849	12	...	...	...	...	3,849	12	(*a*) Used by Department; estimated value Rs. 3. IIc (part) Rs. 10,963.
	Doloo	...	...	58,353	175	...	...	...	...	58,353	175	
	Mull	1,000	(*a*) 3	3,487,215	10,776	...	...	...	...	3,488,215	10,779	
	Gallak canes, 191,610 (estimated) Mds.	...	...	1,017	385	...	...	...	...	1,017	385	
	Jayat ,, 1,573,540 (do.) ,,	...	...	2,143	2,060	...	...	...	...	2,143	2,060	
	Bhudum ,, 33,351 (do.) ,,	...	...	282	70	...	...	...	...	282	70	
	Kerak ,, 7,062 (do.) ,,	...	...	70	11	...	...	...	...	70	11	(*b*) Used by Department; estimated value Re. 1.
	Kuruj paths 17,228 (do.) ,,	...	...	444	27	...	...	...	...	444	27	
	Sungrass 13,800 (do.) ,,	30	(*b*) 1	1,931	40	...	...	...	...	1,961	41	
	Sale money of Sunkholas (do.) ,,	...	...	50,000	110	...	...	...	...	50,000	110	IIe (part) Rs. 2,710.
	Chalmagro seeds ... ... ,,	...	...	7	7	...	...	...	...	7	7	
Orissa.	Moolee bamboos ... ... No.	*	80	2,075	10	...	...	...	...	2,075	90	* Value of 52,250 bamboos sold from previous year's stock.
	Salia ditto ... ... ,,	14,000	119	659,800	1,640	...	...	...	...	673,800	1,759	
	Compensation for illicit removal of Salia bamboos. ,,	...	...	1,405	7	...	...	...	...	1,405	7	
	Bamboos ... ... ,,	...	...	368,420	848	...	...	...	...	368,420	848	Ie, Rs. 199.
	Split bamboos ... ... ,,	...	...	4,520	13	...	...	...	...	4,520	13	IIc (part) Rs. 2,518.
	Grazing—											
	One-month permits for buffaloes No.	...	...	2,473	232	...	...	...	...	2,473	232	
	Ditto ditto calves ... ,,	...	...	708	37	...	...	...	...	708	37	
	Ditto ditto cows ... ,,	...	...	106	7	...	...	...	...	106	7	
	Ditto ditto calves ... ,,	...	...	6	...	...	...	...	...	6	...	
	Ditto ditto bullocks ,,	...	...	64	4	...	...	...	...	64	4	
	Two-month ditto buffaloes ,,	...	...	22	4	...	...	...	...	22	4	
	Three-month ditto bullocks ,,	...	...	9	2	...	...	...	...	9	2	
	Compensation for illicit grazing of buffaloes. ,,	...	...	277	120	...	...	...	...	277	126	
	Ditto calves ... ... ,,	...	...	29	5	...	...	...	...	29	5	
	Ditto cows ... ... ,,	...	...	172	43	...	...	...	...	172	43	
	Ditto bullocks ... ... ,,	...	...	19	5	...	...	...	...	19	5	IId (part) Rs. 465.
	Siali Nai (creepers) ... Mds.	...	...	377	10	...	...	...	...	377	10	
	Thatch grass, bundles 91,749 ... ,,	...	...	45,875	92	...	...	...	...	45,875	92	
	Tamarind fruits ... ... ,,	...	...	2	4	...	...	...	...	2	4	
	Coochila fruit ... ... ,,	...	...	352	22	...	...	...	...	352	22	
	Mango do. ... ... ,,	...	...	46	9	2,954	772	...	...	3,000	781	
	Honey ... ... ,,	...	...	2	4	...	...	...	...	2	4	
	Joon grass, bundles 3,400 ... ,,	...	...	1,700	9	...	...	...	...	1,700	9	
	Brushwood ... ... ,,	...	...	8	...	...	...	...	...	8	...	
	Kamola goondi ... ... ,,	...	...	24	15	...	...	...	...	24	15	
	Sál leaves ... ... ,,	...	...	11	1	...	...	...	...	11	1	
	Canes ... ... ,,	...	...	232	58	...	...	...	...	232	58	
	Mahasadhi plant ... ... ,,	...	...	10	1	...	...	...	...	10	1	
	Gold	...	...	...	1	...	...	...	...	...	1	
	Chara fruits	...	...	...	...	1	...	...	...	1	...	
	Mohul flower	...	...	...	...	786	257	...	...	786	257	
	Sál fruit ... ... Mds.	...	...	...	...	5	2	...	...	5	2	
	Mussla aloo ... ... ,,	...	...	...	...	688	43	...	...	688	43	
	Paul do. ... ... ,,	...	...	...	...	125	8	...	...	125	8	
	Bara kolly ... ... ,,	...	...	...	...	80	20	...	...	80	20	
	Kara aloo ... ... ,,	...	...	...	...	680	53	...	...	680	53	
	Moolee bamboo-shoots ... ... ,,	...	...	...	...	690	225	...	...	690	225	
	Salia ditto ... ... ,,	...	...	...	...	184	57	...	...	184	57	
	Elephant tusks (57½ seers) ... ,,	1	676	...	...	...	...	...	...	1	676	
	PROTECTED FORESTS.											
Sunderbuns.	Golpatha ... ... Mds.	...	...	97,536	1,524	...	...	...	...	97,536	1,524	
	Shells ... ... ,,	...	...	65,408	1,022	...	...	...	...	65,408	1,022	
	Null ... ... ,,	...	...	26,752	418	...	...	...	...	26,752	418	
	Hontal ... ... ,,	...	...	106,112	1,058	...	...	...	...	106,112	1,058	
	Cane ... ... ,,	...	...	3,200	50	...	...	...	...	3,200	50	
	Wax and honey ... ... ,,	...	...	9,518	4,758	...	...	...	...	9,518	4,758	
	Add—Revenue under IIe—Reserved Forests.	...	...	...	...	...	...	...	...	...	...	
	Total Revenue of the Division under IIe.	...	...	...	...	...	...	...	...	...	...	
Orissa.	Moolee bamboos ... ... No.	...	...	* 3,050	27	...	...	...	...	3,050	27	* This includes 3,852,000 bamboos, value Rs. 7,222, removed by 15,408 annual house licenseholder at 250 each.
	Bamboos ... ... ,,	...	...	140,860	283	3,860,640*	7,249	...	...	4,010,500	7,532	
	Split bamboos ... ... ,,	...	...	4,200	13	...	...	...	...	4,200	13	
	Add—Revenue under IIc—Reserved Forests.	...	...	...	...	...	...	...	...	...	...	
	Total Revenue of the Division under IIc.	...	...	...	...	...	...	...	...	...	...	

	Rs.
Ie	676
Free grants... ...	1,437
IIe (part)	226

	Rs.
IIe (part) ...	9,430
... ...	60,166
... ...	69,596

	Rs.
Free grants ...	7,249
IIe (part) ...	323
... ...	2,518
... ...	2,841

FORM No. 55—*continued.*

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1890-91—continued.

Division.	Description of Produce.	Produce removed or utilised. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
	PROTECTED FORESTS—*concluded.*											
Orissa—*concluded.*	Grazing—											
	Permit for the season 1890-91—											
	Cows ... ... No.	...	...	890	169	...	...	...	...	890	169	
	Calves ... ... „	...	...	261	16	...	...	...	...	261	16	
	Buffaloes ... ... „	...	...	36	9	...	...	...	...	36	9	
	Calves ... ... „	...	...	3	...	...	...	...	...	3	...	Free grants .. 11,556
	Cattle grazed under annual house licenses of 15,408 houses at 4 head of cattle each. ...	...	...	...	...	61,632	11,556	...	...	61,632	11,556	IId (part) . 194
	Add—Revenue under IId—Reserved Forests.	...	...	...	...	...	...	...	...	...	...	 465
	Total Revenue of the Division under IId.	...	...	...	...	...	...	...	...	...	...	 659
	Jhattias ... ... Mds.	...	...	465	15	...	...	...	...	465	15	
	Ditto removed under annual „ house license of 15,408 houses at 50 maunds each.	...	...	...	...	770,400	24,075	...	...	770,400	24,075	
	Thorns	...	...	564	12	...	...	...	...	564	12	
	Do. under annual house license of 15,408 houses at 100 maunds.	...	...	...	...	1,540,800	32,100	...	...	1,540,800	32,100	
	Edible jungle products given to Mds. Savars and Bauries free of charge (estimated).	...	...	...	...	16,450	1,000	...	...	16,450	1,000	
	Mango fruits ... ... „	...	...	2,290	252	...	...	...	...	2,290	252	
	Jack do. ... ... „	...	...	132	11	...	...	...	...	132	11	
	Kochila seeds ... ... „	...	...	709	53	...	...	...	...	709	53	
	Tamarind fruit	...	...	113	32	...	...	...	...	113	32	
	Muka „	...	...	1	...	...	...	...	...	1	...	
	Canes ... ... Mds.	...	...	48	12	...	...	...	...	48	12	
	Date leaves ... ... „	...	...	32	1	...	...	...	...	32	1	
	Sál do. ... ... „	...	...	16		...	...	...	...	16		
	Osta bark ... ... „	...	...	32	12	...	...	...	...	32	12	
	Kamalagundi ... ... „	...	...	68	45	...	...	...	...	68	45	
	White stone ... ... C. ft.	...	...	1,925	9	5,000	25	...	...	6,925	34	
	Sand do. ... ... „	...	...	6,425	17	4,800	24	...	...	11,225	41	
	Rubble ... ... „	...	...	100	1	...	...	...	...	100	1	
	Granite ... ... „	...	...	200	1	...	...	...	...	200	1	
	Red clay ... ... „	...	...	225	2	...	...	...	...	225	2	
	White clay ... ... „	...	...	1,675	17	...	...	...	...	1,675	17	Free grants 57,340
	Lime shooting ... ... „	...	...	2,025	20	...	...	...	...	2,025	20	IIe (part) 1,026
	Laterite ... ... „	...	...	116,805	400	23,100	116	...	...	139,905	516	
	Hard stone ... ... „	...	...	40,900	105	...	...	...	...	40,900	105	
	Gravel ... ... „	...	...	3,500	9	...	...	...	...	3,500	9	
	Add—Revenue under IIe—Reserved Forests.	...	...	...	...	...	...	...	...	...	...	 226
	Total Revenue of the Division under IIe.	...	...	...	...	...	...	...	...	...	...	 1,252
	UNCLASSED FORESTS.											
Singbhoom.	Bamboos ... ... No.	...	...	1,600	3	...	...	...	...	1,600	3	IIe (part) 3
	Add—Revenue under IIe—Reserved Forests.	...	...	...	...	...	...	...	...	...	...	 143
	Total Revenue of the sub-division under IIe.	...	...	...	...	...	...	...	...	...	...	 146
	Limestone	...	...	...	5	...	...	...	...	...	5	
	Brushwood	...	...	...	16	...	57	...	...	...	73	
	Sabai grass	...	...	...	6	...	...	...	...	...	6	
	Thatch grass	...	...	...	5	...	...	...	...	...	5	
	Chope fibre	...	...	...	1	...	...	...	...	...	1	
	Leaves	...	...	...	6	...	...	...	...	...	6	IIe (part) 46
	Silk cocoons ... ... No.	...	...	550	5	...	...	...	...	550	5	
	Add—Revenue under IIe—Reserved Forests.	...	...	...	...	...	...	...	...	...	...	 1,531
	Total Revenue of the sub-division under IIe.	...	...	...	...	...	...	...	...	...	...	 1,577
												Free grant 57
Chittagong.	Orah bamboos ... ... No.	...	...	1,115	5	...	...	...	...	1,115	5	
	Mitenga „ ... ... „	...	...	479	1	...	...	...	...	479	1	III (part) 22
	Baleo „ ... ... „	550	2	828,600	3,303	...	...	...	...	829,150	3,304	Free grant 9
	Muli „ ... ... „	8,010	20	9,661,268	27,242	3,000	9	...	...	9,672,278	27,271	
	Permit fees on bamboos ... ... „	...	...	...	2,287	...	...	...	...	...	2,287	
	Deduct—											IIc (part) 32,928
	Amount paid to the Maharajah, Hill Tipperah.	...	...	...	...	...	...	...	...	...	...	 5,918
	IIe.—Unclassed State forests and waste lands, nett.	...	...	...	...	...	...	...	...	...	...	 27,010
	Add—Revenue under IIe.—Reserved Forests.	...	...	...	...	...	...	...	...	...	...	 10,963
	Total Revenue of the Division under IIe.	...	...	...	...	...	...	...	...	...	...	 37,973

FORM No. 55—*continued.*

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1890-91—continued.

Division.	Description of Produce.	Produce removed or utilised. By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
	UNCLASSED FORESTS—*concluded.*											
Chittagong Division—*concluded.*	Jayat canes (750,587) estimated Mds.	...	...	6,096	875	30	2	...	...	7,016	877	
	Gollak ,, (178,464) ,, ,,	...	...	2,664	400	...	...	...	...	2,664	400	
	Bhudum ,, (91,136) ,, ,,	...	...	1,987	144	...	...	...	...	1,987	144	
	Pati ,, (280,341) ,, ,,	...	...	1,703	329	...	...	...	...	1,703	329	
	Bandary ,, (18,837) ,, ,,	...	...	453	25	...	...	...	...	453	25	
	Permit fees on canes (1,020,700) ,,	...	...	...	158	...	...	...	...	...	158	
	Sungrass (2,956,670) estimated ... ,,	...	...	268,936	6,586	33	1	...	...	268,969	6,587	
	Kurtuspattis (84,788) ,, ... ,,	...	...	1,152	131	...	...	...	...	1,152	131	
	Gurjon oil ... ... ,,	...	...	123	02	...	...	...	...	123	02	
	Indian rubber (5½ seers)	...	...	...	1	...	...	...	...	...	1	
	Wax ... ... ,,	...	...	2	10	...	...	...	...	2	10	Free grant ... ... Rs. 3
	Deduct—											IIe (part) 8,730
	Amount paid to Maharajah, Hill Tipperah.	...	...	...	...	...	...	...	...	...	...	 2,589
	IIe—Unclassed State forests and waste lands, nett.	...	...	...	...	...	...	...	...	...	...	 6,141
	Add—Revenue under IIe—Reserved Forests.	...	...	...	...	...	...	...	...	...	...	 2,719
	Total Revenue of the Division under IIe.	...	...	...	...	...	...	...	...	...	...	 8,860
	ABSTRACT OF THE CIRCLE.											
	Bamboos.											Rs.
	Reserved forests ... ... No.	447,496	2,366	5,418,120	16,020	50	1	...	...	5,865,666	19,307	Revenue IIe (part) ... 16,020
												Realised on account of last year 2
	Protected forests ... ... ,,	...	...	157,710	323	3,860,040	7,249	...	...	4,018,350	7,572	Revenue IIe (part) ... 323
												Ditto gross 32,931
												Less amount paid to Maharajah of Hill Tipperah 5,918
	Unclassed, &c., forests ... ... ,,	8,500	22	10,403,062	32,031	3,000	9	...	...	10,504,622	32,962	Net ... 27,013
												Total Revenue credited under IIe 44,258
	Grand Total Bamboos ...	(a) 450,050	(a) 2,408	16,008,802	50,174	3,863,690	7,259	...	....	20,388,638	50,841	(a) Number and value of the year's outturn, not of number sold and revenue realised.
	Grazing and fodder grass.* **RESERVED FORESTS.											
	Grazing—											
	One-month permits for cows ... No.	...	...	29,407	3,605	...	...	...	...	29,407	3,605	
	Ditto ditto calves ... ,,	...	...	1,827	69	...	...	...	...	1,827	60	
	Ditto ditto bullocks ,,	...	...	2,370	344	...	...	...	...	2,370	344	
	Ditto ditto buffaloes ,,	...	...	104,820	2,546	...	...	...	...	104,820	2,546	
	Ditto ditto ponies ... ,,	...	...	142	11	...	...	...	...	142	11	
	Ditto ditto sheep ... ,,	...	...	5,154	321	...	...	...	...	5,154	321	
	Ditto ditto goats ... ,,	...	...	78	10	...	...	...	...	78	10	
	Ditto ditto elephants ,,	...	...	21	93	...	...	...	...	21	93	
	Compensation accepted for illicit grazing. ,,	...	...	(b) 2,264	1,953	...	...	...	...	2,264	1,953	
	Total Grazing, Reserved Forests ,,	...	...	146,083	8,952	...	...	...	...	146,083	8,952	Revenue under IIe grazing (part) ... ... Rs. 8,952
	Fodder ... ... Mds.	464	7	167,624	2,279	282	4	...	...	168,370	2,290	Ditto fodder 2,279
	PROTECTED FORESTS.											
	Grazing—											
	One-month permits for cows ... No.	...	...	7,193	160	...	...	...	...	7,193	160	
	Ditto ditto calves ... ,,	...	...	2,112	16	...	...	...	...	2,112	16	
	Ditto ditto buffaloes ,,	...	...	228	9	...	...	...	...	228	9	
	Ditto ditto not specified ,,	...	...	...	...	739,584	11,556	...	...	739,584	11,556	
	Total Grazing, Protected Forests. ,,	...	...	9,532	194	739,584	11,556	...	...	749,116	11,750	Ditto grazing (part) ... 194
	Grand Total Value, Grazing and Fodder.	...	...	...	...	...	...	...	...	...	...	 11,425

* *Note.*—For the purpose of this abstract of "grazing," permits for grazing issued for various periods have been reduced to, and are expressed in their equivalents in one month-permits, (except those marked (*b*) which represents the number of cattle grazed for one day). The unit is therefore one animal grazed for one month, and the number here given, if divided by 12, will give the average number of animals grazing daily throughout the year.

FORM No. 55—*concluded.*

FOREST DEPARTMENT, BENGAL.

Outturn of Minor Forest Produce during the year 1890-91—concluded.

Division.	Description of Produce.	Produce removed or utilised: By Government agency. Quantity.	By Government agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
	ABSTRACT OF THE CIRCLE—(*concluded*).											
	OTHER MINOR PRODUCE.											
	Cane ... ...Mds.	...	...	...	3,018	...	...	...	...	...	3,018	
	Thatch and other grasses... ... ,,	30	1	...	948	...	5	...	...	...	954	
	Sabai grass ... ... ,,	...	...	...	903	...	...	...	...	...	903	
	Leaves (thatching and other) ... ,,	...	...	...	174	...	...	..	...	...	174	
	Null ... ... ,,	...	...	240,640	3,760	...	...	...	...	240,640	3,760	
	Golpatta ... ... ,,	...	...	3,427,904	53,561	...	...	...	...	3,427,904	53,561	
	Rental ... ... ,,	...	...	12,400	194	...	...	...	...	12,400	194	
	Shells for lime ... ... ,,	...	...	50,432	788	...	...	...	...	50,432	788	
	Lime ... ... ,,	...	...	650	200	...	...	...	...	650	200	
	India-rubber ... ... ,,	...	...	4	64	...	...	...	...	4	64	
	Bark, orchids, resin, fibre, roots and moss ... ... ,,	8	2	...	113	...	414	...	...	...	529	
	Thorns, creepers, stakes and brambles ... ... ,,	...	...	...	54	...	8	...	...	...	62	
	Mica ... ... ,,	...	...	...	691	...	...	...	...	...	691	
	Gold ... ... ,,	...	...	...	1	...	...	...	...	...	1	
	Prospecting lease for minerals ... ,,	...	...	...	640	...	...	...	...	...	640	
	Iron ore ... ... ,,	...	...	...	7	...	...	...	...	...	7	
	Earth, clay, &c. ... ... ,,	...	...	148	4	...	...	...	...	148	4	
	Lac ... ... ,,	...	...	10	18	...	...	...	...	10	18	
	Wax and honey ... ... ,,	1	...	3,654	1,803	...	...	...	...	3,655	1,803	
	Flowers, fruits and seeds ... ... ,,	..	...	...	251	...	1,031	...	...	...	1,282	
	Manure ... ... ,,	...	...	100	6	...	...	...	...	100	6	
	Long peper ... ... ,,	...	...	13	26	...	...	..	...	13	26	
	Slate stone ... ...C.ft.	...	...	...	26	...	...	...	...	...	26	
	Other ,, ... ,,	...	...	14,201	72	14,000	70	...	...	28,201	142	
	Silk cocoons ... ...No.	10,519	575	13,209	153	...	...	...	...	...	728	
	Seedlings ... ... ,,	...	...	2,638	136	3,600	190	...	...	6,238	326	
	Kamalagundi powder ... ...Mds.	...	...	24	15	...	...	...	...	24	15	
	Fishing compensation ... ... ,,	...	...	...	2	...	...	...	...	...	2	
	Elephant tusks (57½ seers) ... ,,	1	676	...	...	...	...	...	...	1	676	
	Total value, other minor produce (Reserved Forests) ... ... ,,	...	1,254	...	67,753	...	1,718	...	...	...	70,725	IIa.—Reserves, Rs. 67,753.
	PROTECTED FORESTS.											
	Cane ... ...Mds.	...	...	3,248	62	...	...	...	...	3,248	62	
	Leaves (thatching and others) ... ,,	...	...	48	1	..	...	...	...	48	1	
	Null ... ... ,,	...	...	26,752	416	...	...	...	...	26,752	416	
	Golpatha ... ... ,,	...	...	97,536	1,524	...	...	...	...	97,536	1,524	
	Rental ... ... ,,	...	...	106,112	1,658	...	...	...	...	106,112	1,658	
	Shells for lime ... ... ,,	...	...	65,408	1,022	...	...	...	...	65,408	1,022	
	Lime ... ... ,,	...	...	2,025	20	...	...	...	...	2,025	20	
	Bark, orchids, resin, fibres, roots and moss ... ... ,,	...	...	32	12	...	...	...	...	32	12	
	Thorns, creepers, stakes and brambles ... ... ,,	...	...	1,020	27	2,311,200	56,175	...	...	2,312,220	56,202	
	Earth, clay, &c. ... ... ,,	...	...	1,900	19	...	...	...	...	1,900	19	
	Wax and honey ... ... ,,	...	...	9,518	4,758	...	...	...	...	9,518	4,758	
	Flowers, fruits and seeds ... ... ,,	...	...	3,343	348	...	...	...	...	3,343	348	
	Kamalakundi powder ... ... ,,	...	...	68	45	...	...	...	...	68	45	
	Edible jungle products ... ... ,,	...	...	...	...	16,450	1,000	...	...	16,450	1,000	
	Laterite ... ...C.ft.	...	...	116,805	400	23,100	116	...	...	139,905	516	
	Granite ... ... ,,	...	...	200	1	...	...	..	...	200	1	
	Other stones ... ... ,,	...	...	52,850	141	9,800	49	...	...	62,650	190	
	Total value, minor produce (Protected Forests)	...	...	...	10,456	...	57,340	...	...	...	67,796	IIa.—Protected, Rs. 10,456.
	UNCLASSED FORESTS.											
	Cane ... ...Mds.	...	...	13,803	1,940	30	2	...	...	13,833	1,942	
	Thatch and other grass ... ... ,,	...	...	...	6,591	33	1	...	...	...	6,592	
	Sabai grass ... ... ,,	...	...	...	6	...	...	...	...	...	6	
	Leaves (thatching and other) ... ,,	...	...	...	8	...	...	...	...	...	8	
	Lime ... ... ,,	...	...	...	5	...	...	...	...	...	5	
	Bark, orchids, resin, fibres roots and moss ... ... ,,	...	...	...	1	...	...	...	...	...	1	
	Thorn, creepers, stakes and brambles	...	...	...	16	...	57	...	...	...	73	
	Gurjon oil	...	...	123	62	...	...	...	...	123	62	
	India-rubber	...	...	...	1	...	...	...	...	...	1	
	Wax	...	...	2	10	...	...	...	...	2	10	
	Kuruj path	...	...	1,152	131	...	...	...	...	1,152	131	
	Silk cocoons ... ...No.	...	...	550	5	...	...	...	...	550	5	
	Total other minor produce (Unclassed &c., forests ... ... ,,	...	...	...	8,776	...	60	...	...	...	8,836	IIc.—Unclassed ... ... Rs. 8,776 *Less*—amount paid Maharaja, Hill Tipperah .. 2,589 Balance 6,187
	Grand Total value of the Circle ,,	...	1,254	...	86,985	...	59,118	...	...	...	1,47,357	Total revenue credited under IIa 84,396

Deduct—Outstanding realised ... ... Rs. 8
Sale of fodder shown under grazing ... 7 — 15
1,253
Add—Price of thatch grass used by Department ... 1
Total ... 1,254
Revenue Ia ... ... Rs. 1,268

FORM No. 56.

FOREST DEPARTNENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts and sold locally during the year 1890-91.

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
TIMBER.				
Balance at commencement of the year—				
Direction Division—(Bengal share of Gunduck drift)—				
Miscellaneous	907	2,074	907	2,974
Darjeeling Division—				
Scantling champ	2,075	890		
Ditto buk	610	1,426		
Ditto phalat	18	27	2,703	2,343
Teesta Division—				
Sál sleepers	230	306		
Sissu poles	7	...	237	306
Kurseong Division—				
Scantling (various)	20	16	20	16
Julpigoree Division—				
Sál logs	16	530		
,, poles	3	12	19	542
Buxa Division—				
Sissu log	1	13		
Sál ,, ...	218	7,832		
,, sleepers	2,548	3,429		
,, scantling	393	414		
,, slabs	70	...		
,, poles	167	...		
Miscellaneous scantling ...	36	17	3,430	11,705
Singbhoom Division—				
Sál sleepers	1,532	4,803		
,, scantling	41	36		
,, beams	36	128		
,, planks	60	31		
,, slab	1	1		
,, poles	970	970		
Karam scantling	5	3		
,, beams	1	6	2,646	5,978
Sunderbuns Division—				
Sundri logs	20	250		
Pussur ,, ...	3	7		
Sundri boats	2	675		
,, roof beams	18	5		
,, planks	15	12		
Teakwood planks	54	6		
Sundri posts	33	129		
Goran ,, ...	809	346	943	1,630
Chittagong Division—				
Boats	2	99		
Posts	4	8		
Saplings	28	28	34	135
Orissa Division—				
Sál logs	153	4,458		
Scantling (various)	22	18		
Sál posts ,, ...	34	293		
Other posts	21	45	230	4,814
Total balance ...	...	...	11,178	30,443
Received from the forests in Sale Depôts—				
Darjeeling Division—				
Scantling champ	127	108		
,, oak	208	502		
,, buk	4	16		
,, lall	32	45	371	731
Kurseong Division—				
Scantling, sál	359	356		
Sál post	1	12	360	368

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Removed by purchasers from Sale Depôts—				
Direction Division—(Bengal share of Gunduck drift)—				
Miscellaneous	1,153	15,247	1,153	15,247
Darjeeling Division—				
Scantling miscellaneous ...	1,386	398	1,386	398
Julpigoree Division—				
Sál logs	80	2,106		
,, poles	204	1,028		
,, piece	1	6	294	3,140
Buxa Division—				
Sál logs	28	957		
Sissu ,, ...	1	11		
Sál poles	29	26		
,, sleepers	12	17		
,, scantling	760	1,156		
,, pieces	20	16		
,, slabs	656	...	1,506	2,188
Singbhoom Division—				
Sál sleepers	1,527	4,772		
,, scantling	35	26		
,, beams	99	433		
,, planks	55	43		
,, slab	1	1		
,, poles	514	514		
Karam beam	1	6	2,232	5,795
Sunderbuns Division—				
Sundri boats	2	450		
,, dingee	2	250		
,, posts	29	104	33	804
Chittagong Division—				
Boats	33	1,577		
Logs	132	3,281		
Scantling	2	16		
Planks	3	22		
Piece	1	2		
Posts	57	143		
Saplings	28	28		
Jarool sleepers	500	750	756	5,819
Orissa Division—				
Sál logs	21	893	21	893
Kossi Drift Division—				
Miscellaneous pieces	27	...	27	...
Total removed by purchasers from Sale Depots	...	...	7,408	34,279
Sold locally (as *per contra*) ...	...	...	5,706	18,002
Given up to claimants—				
Direction Division—(Bengal share of Gunduck drift)—				
Miscellaneous	303	984	303	984
Sunderbuns Division—				
Sundri boats	2	875		
Goran posts	809	340	811	1,215
Chittagong Division—				
Boat	1	37		
Logs	2	20	3	57
Total given up to claimants ...	...	...	1,117	2,256
Reduced on remeasurements—				
Buxa Division—				
Sissu logs	...	2		
Sál ,, ...	...	801		
,, poles	...	100	...	903

FORM No. 56—*continued.*

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts and sold locally during the year 1890-91—continued.

TIMBER—*continued.*

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
***Received from the Forests in sale depôts*—(concluded.)**				
Julpigori Division—				
Sál logs	98	2,276		
„ poles	209	1,052	307	3,330
Buxa Division—				
Sál logs	75	2,529		
Sissu logs	15	357		
Sál scantling	308	844		
„ poles	91	447		
„ slabs	284	...	863	4,177
Singbhoom Division—				
Sál beams	81	357		
„ planks	53	39		
„ poles	270	270		
„ slabs	7	6	411	672
Chittagong Division—				
Gamhar logs	13	240		
Kadam „	3	60		
Miscellaneous poles	77	1,242	93	1,551
Orissa Division—				
Sál logs	53	1,708		
Pissal log	1	18	54	1,726
Total received from the forests in Sale Depôts.	...	...	2,459	12,555
Received from the forests and sold locally—				
Darjeeling Division—				
Champ scantling (confiscated)	50	24	50	24
Kurseong Division—				
Sál log (confiscated)	1	56		
Simul logs	4	120		
Sál poles	352	2,449		
Miscellaneous	125	361	482	3,036
Julpigori Division—				
Sissu log	1	30	1	30
Buxa Division—				
Sál scantling	10	17		
„ pieces	363	2,801		
„ slabs	340	...	713	2,818
Singbhoom Division—				
Sál sleepers	3,504	10,944		
„ scantling	1	1		
„ beams	8	32		
„ planks	763	857	4,276	11,834
Orissa Division—				
Sál log	...	9		
Pissál log	...	3		
Sál saplings	12	12		
„ pegs	172	21	184	45
Total sold locally ...	...	...	5,706	17,786
Received by collection of drift in Sale Depôts—				
Direction Division—				
(Bengal share of Gunduck drift)—				
Miscellaneous	1,052	14,903	1,052	14,903
Sunderbuns Division—				
Sundri dingee	1	125	1	125
Chittagong Division—				
Boats	34	1,647		
Logs	127	3,240		
Planks	3	22		
Scantling	2	16		
Posts	4	9	170	4,934
Kossi Drift Division—				
Miscellaneous pieces	4	...		
Ditto (balance of 1889-90 not shown in form No. 56 of that year)	23	...	27	...
Total drift ...	...	...	1,250	20,002

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
***Reduced on remeasurements*—(concluded.)**				
Singbhoom Division—				
Sál sleepers	...	24		
„ planks	...	3	...	27
Orissa Division—				
Sál logs	...	24	...	24
Total reduced on remeasurement...	...	...	...	954
Written off as lost and used by department—				
Direction Division—				
(Bengal share Gunduk drift)—				
Miscellaneous	3	30	3	30
Darjeeling Division—				
Scantling, champ	2,167	976		
„ buk	610	1,438		
„ oak	108	246		
„ phalat	18	27		
„ lali	30	43	2,933	2,727
Kurseong Division—				
Sál scantling	359	356		
„ post	1	12	360	368
Julpigori Division—				
Sál logs	4	80		
„ poles	8	30		
„ piece	1	35	13	149
Buxa Division—				
Sál logs	38	1,773		
„ poles	190	132		
„ sleepers	907	1,384		
„ scantling	40	18		
„ slabs	16	...		
Miscellaneous scantling ...	18	12	1,209	3,319
Singbhoom Division—				
Sál sleepers	7	10		
„ poles	212	212		
„ slabs	7	6	226	237
Sunderbuns Division—				
Sundri planks	15	12		
„ roof beams	3	1		
Teakwood planks	4	1	22	14
Chittagong Division—				
Gamhar logs	13	240		
Kadam „	3	60		
Miscellaneous poles	20	40		
Boat	1	62	37	411
Total lost and used by Department	...	...	4,808	7,255
Free grants to Public Works Department, Military Works.				
Buxa Division—				
Sál scantling	212	119		
„ sleepers	12	16	224	135
Total free grants ...	„	...	224	135
Converted in depôts—				
Julpigoree Division—				
Sal log	1	38	1	38
Buxa Division—				
Sál logs	10	256		
„ scantling	12	101	22	357
Chittagong Division—				
Miscellaneous poles	57	1,202	57	1,202
Total converted in depôts ...	...	...	80	1,597

FORM No. 56—*continued.*

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts and sold locally during the year 1890-91—continued.

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
TIMBER—*concluded.*				
Found in depôts—				
Buxa Division—				
Sál sleepers	30	48		
,, scantling	1	2		
,, pieces	16	5		
,, poles	16	14		
,, slabs	159	...	228	69
Singbhoom Division—				
Sál scantling	3	3	3	3
Total found in depôts ...	...	...	231	72
Received by confiscation in depôts—				
Sunderbuns Division—				
Sundri logs	41	206		
Pussur ,, ...	1	2		
Amoor posts	9	11		
Sundri boat	3	800		
Do. dingee	1	125	55	1,144
Chittagong Division—				
Logs	7	61		
Pieces	5	9		
Posts	62	152	74	222
Total confiscated in depôts ...	...	...	129	1,366
Received by purchase in depôts—				
Chittagong Division—				
Jarool sleepers	500	750	500	750
Total received by purchase ...	...	...	500	750
Received by dismantling buildings—				
Darjeeling Division—				
Scantling, miscellaneous ...	...	...	1,405	454
Received by dismantling building and sold locally—				
Kurseong Division—				
Scantling, &c., miscellaneous	...	...	...	216
Received by remeasurement—				
Buxa Division—				
Scantling, sál	...	17		
Ditto miscellaneous ...	...	3	...	20
Singbhoom Division—				
Sál sleepers	...	9		
,, beams	...	38	...	47
Total received by remeasurement...	...	...	...	67
Received by conversion in depôts—				
Julpigori Division—				
Sál pieces	2	38	2	38
Buxa Division—				
Sál scantling	320	225		
,, pieces	4	11		
,, slabs	153	...	477	236
Total received by conversion in depôts	...	...	479	274
Received by transfer from other division—				
Kurseong Division—				
Sál sleepers	...	...	230	306
Received by transfer from sale depôts—				
Buxa Division—				
Sál logs	23	703		
,, pole	1	3		
,, sleepers	1,987	2,437		
,, scantling	8	13	2,019	3,156
Total transferred from other sale depôts	...	...	2,019	3,156
Total timber ...	...	...	25,586	87,467

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Transferred to other sale depôts—				
(As *per contra*)	...	...	2,019	3,156
Transferred to other division—				
(As *per contra*)	...	...	230	306
Balance at close of the year—				
Direction Division—				
(Bengal share of Gundnck, drift)—				
Miscellaneous	500	1,670	500	1,670
Darjeeling Division—				
Scantling, champ	35	23		
Ditto, buk	5	18		
Ditto, oak	90	305		
Ditto, lali	2	2		
Ditto, miscellaneous ...	19	50	163	403
Teesta Division—				
Sissu poles	7	...	7	...
Kurseong Division—				
Sál sleepers	230	306		
Scantling (various)	20	16	250	322
Julpigoree Division—				
Sál logs	20	583	20	583
Buxa Division—				
Sál sleepers	1,653	2,060		
,, scantling	88	108		
Other ,, ...	18	8		
Sál logs	217	6,574		
Sissu ,, ...	15	357		
Sál poles	55	203	2,046	9,310
Singbhoom Division—				
Sál scantling	7	10		
,, planks	58	24		
,, beams	18	90		
,, poles	514	514		
Karau scantling	5	3	602	641
Sunderbuns Division—				
Sundri logs	70	462		
Pussur ,, ...	4	9		
Teakwood planks	30	5		
Sundri roof beams	15	4		
Amoor posts	9	11		
Sundri ,, ...	4	25		
Do. boat	1	350	133	866
Chittagong Division—				
Boat	1	70		
Posts	13	26		
Piece	4	7	18	103
Orissa Division—				
Sál logs	185	5,249		
Pinsál log	1	18		
Sál posts	34	203		
Miscellaneous posts	21	45		
Scantling (various)	22	18	263	5,533
Total balance ...	...	...	3,999	19,527
Total Timber ...	...	...	25,586	87,467

FORM No. 56—*continued.*

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts or sold locally during the year 1890-91—continued.

PARTICULARS.	No. or quantity.	Cubic feet solid wood.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet solid wood.	PARTICULARS.	No. or quantity.	Cubic feet solid wood.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet solid wood.
ABSTRACT OF THE CIRCLE—TIMBER.									
Balance at commencement of the year	...	...	11,178	30,443	Removed by purchasers from sale depôts	7,408	34,279		
Received from the forests in sale depôts	2,459	12,555			Sold locally	5,706	18,002	13,114	52,281
Received from the forests and sold locally	5,706	17,780			Given up to owners	1,117	2,236		
Received from the forests by collection of drift	1,250	20,022			Reduced on re-measurement ...	...	954		
Found in depôts	231	72			Lost and used by department ...	4,803	7,275	5,920	10,465
Received by confiscation in depôts...	129	1,366							
Ditto by purchase	500	750			Free grants to Public Works Department, Military Works	...	...	224	135
Ditto by dismantling buildings...	1,405	670			Converted in depôts	...	...	80	1,597
Ditto by re-measurement in depôts	...	67			Transferred to other sale depôts and divisions	...	...	2,249	3,462
			11,680	53,288	Balance at close of the year ...	...	...	3,999	19,527
Received by conversion in depôts ...	...	...	479	274					
Ditto by transfer from other divisions	...	...	230	306					
Ditto by transfer from sale depôts	...	...	2,019	3,156					
GRAND TOTAL, TIMBER ...	...	...	25,586	87,467	GRAND TOTAL, TIMBER ...	...	...	25,586	87,467
FUEL.									
Balance at commencement of the year—					Removed by purchaser from depôts—				
Direction Division—					Direction Division—				
(Bengal share of Gunduck drift)—					(Bengal share of Gunduck drift.)				
Firewood ... ... Mds.	5	10	5	10	Firewood ... ... Mds.	9,501	19,003	9,501	19,003
Darjeeling Division—					Darjeeling Division—				
Firewood ... ... ,,	14,339	25,093			Firewood ... ... ,,	90,481	155,342		
Charcoal ... ... Bags.	6,724	47,068	21,063	72,161	Charcoal ... ... Bags.	29,160	204,120	119,641	362,462
Kurseong Division—					Kurseong Division—				
Charcoal ... ... Mds.	260	1,820	260	1,820	Charcoal ... ... Mds.	260	1,820	260	1,820
Julpigori Division—					Julpigori Division—				
Firewood (193 pieces) ... ,,	1,012	1,771	1,012	1,771	Firewood (3,415 pieces) ,,	6,311	11,044	6,311	11,044
Singbhoom Division—					Singbhoom Division—				
Firewood ... ... ,,	2,301	4,185			Firewood ... ... ,,	3,541	6,197		
Charcoal ... ... ,,	37	259	2,428	4,444				3,541	6,197
Sunderbuns Division—					Sunderbuns Division—				
Firewood ... ... ,,	1,070	1,873	1,070	1,873	Firewood ... ... ,,	618	1,082	618	1,082
Chittagong Division—					Chittagong Division—				
Charcoal ... ... ,,	17	119	17	119	Charcoal ... ... ,,	15	105		
					Firewood ... ... ,,	157	275	172	380
Orissa Division—					Total removed by purchasers from sale depôts	...	...	140,044	401,988
Firewood ... ... ,,	176	308	176	308					
Total balance ...	...	...	26,031	82,500	Received from forests and sold locally (as *per contra*)	...	...	7,554	27,311
Received in sale depôts—									
Darjeeling Division—									
Firewood ... ... Mds.	92,080	161,140			Written off as lost and used by department—				
Charcoal ... ... Bags.	35,520	248,640	127,600	409,780	Darjeeling Division—				
					Firewood ... ... Mds.	378	661		
Singbhoom Division—					Charcoal ... ... Bags.	130	910	508	1,571
Firewood ... ... Mds.	1,313	2,298	1,313	2,298					
Total received in sale depôts ...	...	...	128,913	412,078	Singbhoom Division—				
					Charcoal ... ... Mds.	37	259	37	259
Received from forests and sold locally—									
Darjeeling Division—									
Firewood ... ... Mds.	45	79			Total written off and used by department ... ... Mds.	...	...	545	1,830
Charcoal ... ... Bags.	884	6,188	929	6,267					
					Given up to claimants—				
Teesta Division—					Sunderbuns Division—				
Charcoal ... ... Mds.	1,800	12,600	1,800	12,600	Firewood ... ... ,,	...	...	500	1,033
Kurseong Division—									
Firewood ... ... ,,	4,825	8,444	4,825	8,444	Reduced by re-measurement—				
					Darjeeling Division—				
Total sold locally ...	...	...	7,554	27,311	Charcoal ... ... Bags.	...	...	28	196

FORM No. 56—continued.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depôts, or sold locally during the year 1890-91—continued.

PARTICULARS.	No. or quantity.	Cubic feet solid wood.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet solid wood.	PARTICULARS.	No. or quantity.	Cubic feet solid wood.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet solid wood.
FUEL—*concluded.*									
Received by collection of drift in sale depôts—					Converted in depôts—				
Direction Division—					Darjeeling Division—				
(Bengal share of Gunduck drift)—					Firewood ... ... Mds.	...	...	8,410	14,717
Firewood ... ... Mds.	9,496	18,993	9,496	18,993					
Julpigori Division—					Transferred to other sale depôts (as per contra)	...	...	16,052	49,250
Firewood (3,295 pieces) ,,	5,878	10,286	5,878	10,286					
Chittagong Division—					Balance at close of the year—				
Firewood ... ... ,,	157	275	157	275	Darjeeling Division—				
					Firewood ... ... Mds.	17,154	30,019		
					Charcoal ... ... Bags.	12,997	90,970		
					,, dust ... ... ,,	22	154		
Total drift ...	...	...	15,531	29,554				30,173	121,152
Found in depôts—					Julpigori Division—				
Darjeeling Division—					Firewood (73 pieces) ... Mds.	579	1,013		
Firewood ... ... Mds.	1,725	3,019						579	1,013
Charcoal ... ... Bags.	93	651	1,818	3,670					
Total found in depôts ...	...	...	1,818	3,670	Singbhoom Division—				
					Firewood ... ... ,,	509	891		
								509	891
Received by confiscation in depôts—									
Darjeeling Division—									
Firewood ... ... Mds.	13	22	13	22	Chittagong Division—				
					Charcoal ... ... ,,	44	308		
								44	308
Singbhoom Division—									
Firewood ... ... ,,	56	98	56	98	Orissa Division—				
					Firewood ... ... ,,	176	308		
								176	308
Sunderbuns Division—									
Firewood ... ... ,,	138	242	138	242	Total balance	...	...	31,481	123,672
Total confiscated in depôts ...	...	...	207	362					
Received by conversion in depôts—									
Darjeeling Division—									
Firewood ... ... Mds.	8,266	14,465	8,266	14,465					
Chittagong Division—									
Charcoal ... ... Mds.	42	294	42	294					
Total conversion in depôts ...	...	...	8,308	14,759					
Received by re-measurement in depôts—									
Singbhoom Division—									
Firewood ... ... Mds.	290	507	290	507					
Total re-measurement ...			290	507					
Received by transfer from sale depôts—									
Darjeeling Division—									
Firewood ... ... Mds.	12,020	21,035							
Charcoal ... ... Bags.	3,772	26,404	15,792	47,439					
Kurseong Division—									
Charcoal ... ... Mds.	260	1,820	260	1,820					
Total transferred from other sale depôts.	...	...	16,052	49,250					
Grand Total, Fuel ...	...	...	204,704	620,006	Grand Total, Fuel ...	...	...	204,704	620,006

FORM No. 56—*concluded.*

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government Agency and brought to Sale Depots, or sold locally during the year 1890-91—concluded.

BAMBOOS.

PARTICULARS.	No. or quantity.	Total of each head.	PARTICULARS.	No. or quantity.	Total of each head.
Balance at commencement of the year—	**No.**	**No.**	**Removed by purchasers from depôts—**	**No.**	**No.**
Palamow Division—			Palamow Division—		
Bamboos	181,616		Bamboos	581,883	
Do. ropes	200		Singbhoom Division—		
Singbhoom Division—			Bamboos	3,069	
Bamboos	2,160		Chittagong Division—		
Orissa Division—			Bamboos	8,560	
Bamboos	40,350	224,226	Orissa Division—		
Received from forests in depôts—			Bamboos	54,250	648,362
Palamow Division—			**Sold locally as (as per contra)—**		
Bamboos	428,078		Bamboos	12,000	
Singbhoom Division—			**Lost and used by Department—**		
Bamboos	4,418		Palamow Division—		
Chittagong Division—			Bamboos	500	
Bamboos	1,000		Do. ropes	100	
Orissa Division—			Singbhoom Division—		
Bamboos	14,000	447,496	Bamboos	1,921	
Received from forests and sold locally—			Chittagong Division—		
Orissa Division—			Bamboos	1,000	3,521
Bamboos	12,000	12,000	**Balance at close of the year—**		
Received by collection of drift—			Palamow Division—		
Chittagong Division—			Bamboos	27,311	
Bamboos	8,560	8,560	Do. ropes	100	
			Singbhoom Division—		
			Bamboos	988	28,399
Total Bamboos ...		692,282	Total Bamboos ...		692,282

OTHER MINOR PRODUCE.

	Mds.	Mds.		Mds.	Mds.
Balance at commencement of the year—			**Removed by purchasers from sale depôts—**		
Palamow Division—			Hazaribagh Division—		
Lahasi ropes (27)	.....		Silk cocoons (No. 13,860)	10	
Hazaribagh Sub-division—			Singbhoom Division—		
Silk cocoons (No. 13,545)	10		Sabai grass	3	13
Singbhoom Division—			**Received from forests and sold locally—**		
Sabai grass	45		Darjeeling Division—		
Do. ropes (72 bundles)	2		Fodder grass	464	
Thatch grass (200 do.)	4	61	Bamboo rhizom	8	
Received from forests in sale depôts—			Singbhoom Division—		
Chittagong Division—			Silk cocoons (No. 19,519)	.....	472
Sun grass (300 bundles)	30	30	**Given up to owners—**		
Received from forests and sold locally—			Sunderbuns Division—		
Darjeeling Division—			Wax and honey	1	
Fodder grass	464		**Used by department—**		
Bamboo rhizoms	8		Palamow Division—		
Singbhoom Division—			Lahasi ropes (2)	.....	
Silk cocoons (No. 19,519)	.....	472	Chittagong Division—		
Found in depôt—			Sun grass (300 bundles)	30	30
Hazaribagh Division—			**Balance at close of the year—**		
Silk cocoons (No. 15)	.....	.....	Palamow Division—		
Received by confiscation—			Lahasi ropes (25)	.....	
Sunderbuns Division—			Singbhoom Division—		
Wax and honey	1	1	Sabai grass	42	
			Do. ropes (72 bundles)	2	
			Thatch grass (200 do.)	4	48
GRAND TOTAL, OTHER PRODUCE	.....	564	GRAND TOTAL, OTHER PRODUCE ...	.....	564

MISCELLANEOUS ARTICLES.

	No.	No.		No.	No.
Balance at commencement of the year—			**Removed by purchasers—**		
Sunderbuns Division—			Orissa Division—		
Country axes	2		Elephant tusks	2	2
Do. *daos*	3	5			
Received from forests—					
Orissa Division—					
Elephant tusks	2	2			
Received by confiscation—			**Given up to owners—**		
Sunderbuns Division—			Sunderbuns Division—		
Country axes	3		Country axes	5	
Do. sickle	1	4	Do. *daos*	3	
			Do. sickle	1	9
GRAND TOTAL, MISCELLANEOUS ARTICLES	.....	11	GRAND TOTAL, MISCELLANEOUS ARTICLES	.....	11

FORM No. 57A.

FOREST DEPARTMENT, BENGAL.

Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1890-91.

DESCRIPTION OF TIMBER AND OTHER PRODUCE.	ON HAND AT COMMENCEMENT OF THE YEAR.			ON HAND AT CLOSE OF THE YEAR.			DIFFERENCE IN VALUE.		REMARKS.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
TIMBER.			Rs.			Rs.	Rs.	Rs.	
Direction Division.									
Miscellaneous	907	2,974	995	500	1,676	305	...	690	
Darjeeling Division.									
Scantling (various)	2,703	2,343	1,723	160	403	360	...	1,363	
Teesta Division.									
Sleepers, sál	230	306	230	...	...	...	...	...	
Poles	7	...	...	7	...	...	...	...	
Total ...	237	306	230	7	...	...	...	230	
Kurseong Division.									
Sál sleepers	...	...	...	230	306	115	...	...	
Scantling (various)	20	16	8	20	16	4	...	...	
Total ...	20	16	8	250	322	119	111	...	
Julpigori Division.									
Sál logs	16	530	530	20	583	583	...	...	
,, poles	3	12	8	...	...	...	...	...	
Total ...	19	542	538	20	583	583	45	...	
Buxa Division.									
Logs	219	7,845	5,884	232	6,931	5,198	...	...	
Sleepers	2,548	3,429	697	1,653	2,060	515	...	...	
Scantlings	429	431	215	106	116	58	...	...	
Poles and slabs	243	...	61	55	203	14	...	...	
Total ...	3,439	11,705	6,797	2,046	9,310	5,785	...	1,012	
Singbhoom Division.									
Sleepers	1,532	4,803	4,803	...	...	...	...	...	
Scantlings	143	204	204	88	127	127	...	...	
Poles	970	970	243	514	514	128	...	...	
Slabs and pieces	1	1	1	...	...	...	...	...	
Total ...	2,646	5,978	5,251	602	641	255	...	4,996	
Sunderbuns Division.									
Logs	32	263	232	74	471	352	...	...	
Scantlings	38	17	20	15	4	2	...	...	
Posts	842	409	140	13	36	10	...	...	
Teak planks	34	6	10	30	5	5	...	...	
Boats	2	875	100	1	350	50	...	...	
Total ...	948	1,630	502	133	866	419	...	83	
Chittagong Division.									
Boats	2	99	10	1	70	5	...	...	
Posts	4	8	2	13	26	13	...	...	
Sapling	28	28	7	...	...	...	...	...	
Piece	...	...	...	4	7	1	...	...	
Total ...	34	135	19	18	103	19	...	...	
Orissa Division.									
Logs	153	4,458	557	186	5,267	658	...	...	
Scantling (various)	22	18	4	22	18	4	...	...	
Sál posts	34	293	56	34	293	56	...	...	
Other posts	21	45	1	21	45	1	...	...	
Total ...	230	4,814	618	263	5,623	719	101	...	
Total Timber ...	11,178	30,443	16,681	3,900	19,527	8,564	...	8,117	
FUEL.									
Direction Division.									
Firewood ... ... Mds.	5	10	1	...	...	...	...	1	Bengal share of Gunduck drift.
Darjeeling Division.									
Firewood ... ... Mds.	14,330	25,093	4,302	17,154	30,019	5,146	...	...	
Charcoal ... ... Mds.	6,724	47,068	6,724	13,019	91,133	12,693	...	...	
Total ...	21,063	72,161	11,026	30,173	121,152	17,839	6,813	...	
Kurseong Division.									
Charcoal ... ... Mds.	260	1,820	200	...	...	...	...	260	
Julpigori Division.									
Firewood ... ... Mds.	1,012	1,771	202	579	1,013	58	...	144	
Singbhoom Division.									
Firewood ... ... Mds.	2,891	4,185	448	509	691	95	...	...	
Charcoal ... ... ,,	37	259	37	...	...	...	...	...	
Total ...	2,428	4,444	485	509	691	95	...	300	

FORM No. 57A—*concluded.*

FOREST DEPARTMENT, BENGAL.

Abstract showing the value of Timber and other Produce at Sale Depôts for the year 1890-91—concluded.

DESCRIPTION OF TIMBER AND OTHER PRODUCE.	ON HAND AT COMMENCEMENT OF THE YEAR.			ON HAND AT CLOSE OF THE YEAR.			DIFFERENCE IN VALUE.		REMARKS.
	No.	Cubic feet.	Value.	No.	Cubic feet.	Value.	In favour of the year.	Against the year.	
Fuel—(concluded.)									
Sunderbuns Division.			Rs.			Rs.	Rs.	Rs.	
Firewood ... ... Mds.	1,070	1,873	220	...	...	...	...	220	
Chittagong Division.									
Charcoal ... ... Mds.	17	119	17	44	308	22	5	...	
Orissa Division.									
Firewood ... ... Mds.	176	308	11	176	308	11	...	...	
Total Fuel ...	26,081	82,506	12,222	31,461	123,672	18,025	5,803	...	
BAMBOOS.									
Palamow Division	161,816	...	611	27,411*	...	95	...	816	* Includes 200 bamboo ropes, value Re. 1.
Singbhoom Division	2,160	...	43	966	...	6	...	37	
Orissa Division	40,250	...	25	...	...	...	...	25	
Total Bamboos ...	224,226	...	979	28,309	...	101	...	878	
OTHER MINOR PRODUCE.									
Hazaribagh Division.									
Silk cocoons	13,845	...	220	...	...	...	...	220	
Palamow Division.									
Lahasi ropes	27	...	3	25	...	2	...	1	
Singbhoom Division. Mds. ...	51	...	16	48	...	...	...	16	
Total of minor produce ...	13,923	...	230	73	...	2	...	237	
MISCELLANEOUS ARTICLES.									
Sunderbuns Division	5	...	4	...	...	...	...	4	
GRAND TOTAL VALUE ...	...	...	30,125	...	...	26,692	...	3,433	

FORM No. 57B.

FOREST DEPARTMENT, BENGAL.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1890-91.

DESCRIPTION.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.		REMARKS.
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
Direction Division.		Rs.		Rs.	Rs.	Rs.	
Stores (Mathematical) ...	16	282	16	282	...	...	(a) Mistake in last return; should be 42 = Rs. 317.
Do. (Miscellaneous) ...	4	5	8	13	...	...	
Furniture	58(a)	599	52	446	...	...	
Tents	3	280	4	1,024	...	...	
Total ...	81	1,166	80	1,765	599	...	
Working Plans Division.							
Stores (mathematical) ...	20	183	20	183			
Do. (miscellaneous) ...	50	70	53	60			
Office boxes	2	10	2	10			
Furniture	7	90	7	90			
Tents	...	...	2	174			
Total ...	83	353	84	517	164	...	

DESCRIPTION.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.		REMARKS.
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
Darjeeling Division.		Rs.		Rs.	Rs.	Rs.	Division abolished from 1st January 1891, and stores, &c., shown in the present Darjeeling Division.
Furniture	6	60	...	...	...	...	
Stores (miscellaneous) ...	1	5	...	...	...	...	
Iron safe	1	38	...	...	...		
Tents	2	25	...	...	...		
Total ...	10	128	...	...	...	128	
Darjeeling Division.							
Bungalow (inspection) ...	12	7,500	12	7,300	...		
Range houses	5	1,500	5	1,400	...	...	
Other ditto	38	350	42	550	...	.	
Cattle pound	1	130	1	120	...	...	
Fuel godown	8	2,000	9	7,500	...	...	
Dumpy level	1	100	1	90	...	...	
Other stores (mathematical).	34	330	59	520	...	.	

FORM No. 57B—*concluded.*

FOREST DEPARTMENT, BENGAL.

Abstract showing the Value of Live-stock, Stores, Tools and Plant for the year 1890-91—concluded.

DESCRIPTION.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.		REMARKS.
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
***Darjeeling Division*—(concluded.)**		Rs.		Rs.	Rs.	Rs.	
Other stores (miscellaneous).	470	700	581	905	...	...	
Iron safes	8	280	9	318	...	...	
Furniture	112	400	153	500	...	...	
Tent	1	15	3	40	...	...	
Bullocks	16	300	14	200	...	...	
Total ...	706	13,595	889	19,443	5,848	...	
Teesta Division							
Bungalow (head-quarters)	1	2,300	1	2,300	...	...	
Bungalows (inspection) ...	4	1,700	4	1,600	...	...	
Range houses	4	900	4	900	...	...	
Other ditto	42	300	45	500	...	...	
Stores (mathematical) ...	13	40	13	30	...	...	
Do. (miscellaneous) ...	138	80	127	70	...	...	
Iron safes	5	100	5	80	...	...	
Cash or office boxes ...	3	12	3	10	...	...	
Furniture	55	200	65	250	...	...	
Tents	1	15	1	8	...	...	
Total ...	266	5,647	268	5,748	101	...	
Kurseong Division.							
Bungalow (head-quarters)	1	3,500	1	4,000	...	...	
Bungalows (inspection) ...	4	5,000	5	4,685	...	...	
Range houses	4	250	5	700	...	...	
Other do. (at head-quarters).	3	5,000	3	4,800	...	...	
Other houses in ranges ...	28	150	37	161	...	...	
Elephant shed	1	130	1	140	...	...	
Cattle pound	1	200	1	175	...	...	
Stores (mathematical) ...	33	200	33	180	...	...	
Do. (miscellaneous) ...	329	200	629	261	...	...	
Iron safes	6	100	7	120	...	...	
Chubb's padlock	1	8	1	8	...	...	
Ordinary ditto	7	2	7	2	...	...	
Cash or office boxes ...	2	25	2	10	...	...	
Furniture	122	800	122	700	...	...	
Tents	2	280	2	250	...	...	
Elephant	1	1,200	1	1,200	...	...	
Total ...	545	17,045	857	17,392	347	...	
Julpigori Division (old.)							
Despatch box	1	28	1	28	...	...	
Brass seal	1	2	1	2	...	...	
Total ...	2	30	2	30	...	...	
Julpigori Division (new.)							
Bungalow (head-quarters)	1	600	1	540	...	...	
Bungalows (inspection) ...	2	100	1	90	...	...	
Range houses	4	300	4	270	...	...	
Other buildings (at head-quarters.)	6	100	6	90	...	...	
Other buildings in ranges	29	400	29	360	...	...	
Stores (mathematical) ...	10	60	16	55	...	...	
Do. (miscellaneous) ...	108	200	123	200	...	...	
Iron safes	4	135	4	130	...	...	
Despatch box	1	15	1	12	...	...	
Furniture	47	130	47	100	...	...	
Tent	1	170	1	150	...	...	
Elephant	1	2,500	1	700	...	...	
Total ...	214	4,710	228	2,697	...	2,013	
Buxa Division.							
Bungalow (head-quarters)	1	6,000	1	5,640	...	...	
Bungalows (inspection) ...	4	1,500	4	1,425	...	...	
Range houses	3	250	3	240	...	...	
Other do.	48	300	55	477	...	...	
Store godown	1	10	1	10	...	...	
Elephant shed	1	30	1	30	...	...	
Stores (mathematical) ...	23	80	22	70	...	...	
Do. (miscellaneous) ...	679	700	690	665	...	...	
Iron safes	6	150	6	150	...	...	
Despatch boxes	2	15	2	15	...	...	
Furniture	57	250	57	226	...	...	
Tent	1	100	1	100	...	...	
Elephants	10	16,425	9	16,100	...	...	
Total ...	836	25,870	853	25,148	...	722	
Chota Nagpore Division.							
Stores (mathematical) ...	41	350	41	350	...	...	
Do. (miscellaneous) ...	17	10	17	10	...	...	
Iron safe	1	100	1	100	...	...	
Furniture	45	330	45	330	...	...	
Tents	2	210	2	210	...	...	
Elephant	1	2,000	1	2,000	...	...	
Total ...	107	3,060	107	3,060	...	...	

DESCRIPTION.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.		REMARKS.
	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.	
Palamow Division.		Rs.		Rs.	Rs.	Rs.	
Bungalow (head-quarters)	1	1,600	1	1,600	...	...	
Bungalows (inspection) ...	9	1,900	9	1,900	...	...	
Range houses	4	250	4	250	...	...	
Other do.	19	450	19	450	...	...	
Stores (mathematical) ...	39	270	39	270	...	...	
Do. (miscellaneous) ...	40	140	205	324	...	...	
Iron safe	1	40	1	40	...	...	
Despatch boxes	6	100	6	100	...	...	
Wooden office boxes ...	6	40	6	40	..	...	
Furniture	30	240	30	240	...	...	
Tents	3	300	2	180	...	...	
Elephant	...	...	1	1,000	...	...	
Total ...	167	5,330	323	6,394	1,064	...	
Hazaribagh Division.							
Range houses	2	450	2	450	...	...	
Other do.	5	250	5	250	...	...	
Stores (mathematical) ...	39	170	39	170	...	...	
Do. (miscellaneous) ...	70	120	70	120	...	...	
Iron safe	1	40	1	40	...	...	
Despatch box	1	40	1	40	...	...	
Furniture	35	175	35	175	...	...	
Total ...	153	1,245	153	1,245	...	...	
Singbhoom Division.							
Bungalow (head-quarters)	1	3,500	1	3,500	...	...	
Range houses	11	2,000	11	2,000	...	...	
Other do. in ranges ...	31	600	32	620	...	...	
Elephant shed	1	100	1	100	...	...	
Stores (mathematical) ...	44	400	44	400	...	...	
Do. (miscellaneous) ...	1,461	4,700	1,461	4,700	...	...	
Iron safes	5	200	5	200	...	...	
Furniture	79	500	80	511	...	...	
Tents	2	60	4	400	...	...	
Elephant	1	1,000	1	2,125	...	...	
Buffaloes	3	60	...	...	...	...	
Total ...	1,639	12,920	1,640	14,416	1,496	...	
Sunderbuns Division.							
Revenue station houses ...	40	6,900	43	7,153	...	...	
Stores (mathematical) ...	104	500	110	621	...	...	
Do. (ordnance)	48	90	47	79	...	...	
Do. (ships)	3,309	1,875	5,757	3,202	...	...	
Do. (other)	1,260	2,000	1,243	2,072	...	...	
Iron safes	29	650	29	625	...	...	
Chubb's padlocks	25	150	29	181	...	...	
Furniture	264	1,200	277	1,130	...	...	
Steamer *Cygnet*	1	23,200	1	24,110	...	...	
Barge	1	5,100	1	4,988	...	...	
Jolly boats	3	825	3	743	...	...	
Steamer *Seal*	1	30,300	1	31,372	...	...	
Station boats	50	20,700	48	22,303	...	...	
Total ...	5,141	93,490	7,580	98,654	5,164	...	
Chittagong Division.							
Bungalow (head-quarters)	1	1,900	1	1,700	...	...	
Do. (inspection) ...	1	140	1	1,000	...	...	
Range houses	5	450	5	400	...	...	
Other buildings at head-quarters.	8	1,200	8	1,100	...	...	
Other buildings in ranges...	103	1,900	104	1,800	...	...	
Stores (mathematical) ...	14	320	14	300	...	...	
Do. (miscellaneous) ...	628	1,500	713	1,000	...	...	
Iron safes	17	480	18	500	...	...	
Furniture	111	900	110	930	...	...	
Boats	10	200	10	150	...	...	
Total ...	898	9,050	984	9,480	430	...	
Orissa Division.							
Bungalow (sub-divisional head-quarters).	2	3,200	2	3,200	...	...	
Range houses	8	1,500	10	1,580	...	...	
Other buildings	49	1,250	57	1,221	...	...	
Stores (mathematical) ...	59	290	45	302	...	...	
Do. (miscellaneous) ...	477	1,380	512	1,270	...	...	
Building materials	150	5	150	5	...	...	
Iron safes	9	300	10	400	...	...	
Furniture	70	550	76	612	...	...	
Tent	1	125	1	125	...	...	
Elephants	2	3,300	2	3,300	...	...	
Buffaloes	10	160	9	150	...	...	
Total ...	837	12,120	874	12,174	54	...	
GRAND TOTAL ...	11,69[illegible]	2,05,759	14931	2,18,163	12,044	...	
ABSTRACT.							
Total value.							
Timber and other produce ...		30,125	...	26,692	...	3,433	
Live-stock, stores, tools and plant. ...		2,05,759	...	2,18,163	12,404	...	
GRAND TOTAL VALUE... ...		2,35,884	...	2,44,855	8,971	...	

FORM No. 58.

FOREST DEPARTMENT, BENGAL.

Summary of Revenue of the different Divisions during 1890-91.

BUDGET HEADS.	Direction.	Working Plans Division.	Darjeeling Division.	Teesta Division.	Kurseong Division.	Julpigori Division.	Julpigori Sub-division.	Buxa Sub-division.	Chota Nagpore Division.	Palamow Sub-division.	Hazaribagh Sub-division.	Singhbhoom Sub-division.	Sunderbuns Division.	Chittagong Division.	Orissa Division.	Kusi Drift Division.	TOTAL.
RECEIPTS.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
I.—Timber and other produce removed from the Forests by Government agency—																	
a. Timber	...	...	174 2 0	...	493 11 6	...	2,930 15 3	4,349 5 6	...	...	...	5,930 7 10	76 5 6	1,674 7 9	238 4 3	...	15,857 11 7
b. Firewood and charcoal.	...	...	56,588 4 6	1,012 8 0	654 4 0	...	...	...	...	...	...	469 14 2	.....	10 13 0	...	...	58,755 11 8
c. Bamboos	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	198 12 0	...	3,936 4 6
d. Sandal-wood ...	...	...	...	...	...	...	...	...	...	3,745 4 6	...	54 4 0	.....	...	...	...	.....
e. Grass and other minor produce.	...	...	17 7 6	...	...	...	...	...	...	...	41 14 6	533 3 0	.....	...	675 15 0	...	1,268 8 0
II.—Timber and other produce removed from the Forests by consumers or purchasers	...	...	...	...	...	...	...	...	...	...	...	175 5 5	.....	...	4,047 0 0	...	4,222 5 5
a. Timber	...	...	17,147 10 3	9,030 3 6	10,566 6 4	...	17,374 1 6	17,078 3 9	...	...	9 14 6	15,137 12 1	1,96,393 1 6	24,146 0 0	753 0 0	...	3,07,636 4 8
b. Firewood and charcoal.	...	...	8,525 2 1	3,391 1 9	1,496 6 6	...	4,785 15 0	219 12 0	...	...	198 0 3	1,430 8 10	1,37,859 8 9	383 7 6	1,737 0 0	...	1,59,935 14 8
c. Bamboos ...	...	...	437 4 0	1,237-10 5	1,133 15 0	...	17 0 0	2 12 0	...	34 12 9	434 6 0	145 9 0	.....	37,973 8 6	2,840 8 0	...	44,257 5 8
d. Grazing and fodder grass.	...	...	5,635 4 0	2,063 2 3	1,119 6 8	...	570 10 0	585 8 0	...	471 14 9	111 8 3	208 11 0	.....	...	659 5 6	...	11,425 6 0
e. Other minor produce.	...	...	534 4 0	341 14 0	409 14 6	...	333 4 0	160 1 9	...	90 12 0	1,238 13 3	1,577 8 0	69,596 5 3	8,360 12 0	1,252 12 0	...	84,396 4 9
III.—Drift and waif wood and confiscated forest produce.	4,993 3 0	...	18 6 0	3,970 13 6	693 2 2	...	5,706 10 6	342 3 0	...	...	...	2 4 6	136 8 0	699 8 6	10 13 6	216 0 6	16,789 8 8
IV.—Revenue from Forests not managed by Government.																	
a. Duty on foreign timber and other forest produce.	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	...	...	.....
b. Revenue from shared and private forests.	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	...	...	.....
V.—Miscellaneous—																	
a. Fines and forfeitures	...	...	...	...	...	...	...	...	...	...	...	...	.....	20 0 6	...	...	20 0 0
b. Refunds	6 8	...	99 1 3	12 13 4	0 9 5	...	59 8 0	0 11 2	...	0 0 3	...	74 11 2	35 7 2	2,170 15 1	19 0 0	...	2,473 3 6
c. Other sources ...	...	...	591 4 10	527 8 5	1,177 8 4	...	219 15 8	619 10 0	...	91 2 5	...	238 13 0	6,385 9 0	6,311 2 4	173 0 2	...	16,355 10 2
Total Receipts ...	4,993 9 8	...	89,768 2 5	21,587 11 2	17,745 4 0	...	31,997 15 11	23,338 2 5	...	4,433 14 8	1,944 8 9	26,909 0 0	4,10,482 13 2	82,249 10 8	12,605 6 5	216 0 6	7,27,392 3 3

CALCUTTA,

The 19*th June* 1891.

I. C. BOSE,

Assistant Comptroller-General (Forests).

FORM No. 58—*contd.*

FOREST DEPARTMENT, BENGAL.

Summary of Expenditure of the different Divisions for 1890-91.

BUDGET HEADS.	Direction.	Working Plans Division.	Darjeeling Division.	Teesta Division.	Kurseong Division.	Julpigori Division.	Julpigori Sub-division.	Buxa Sub-division.	Chota Nagpore Division.	Palamow Sub-division.	Hazaribagh Sub-division.	Singbhoom Sub-division.	Sunderbans Division.	Chittagong Division.	Orissa Division.	Kusi Division.	TOTAL.
A.—CONSERVANCY AND WORKS.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
I.—Timber and other produce removed from the Forests by Government agency—																	
a. Timber	...	...	...	...	154 14 0	...	702 5 0	4,846 8 0	...	...	...	170 12 2	...	1,674 7 9	871 14 0	...	8,422 12 11
b. Firewood and charcoal	...	...	38,318 12 7	576 10 0	570 14 4	...	...	...	...	...	...	246 2 3	...	25 6 0	...	...	39,737 13 2
c. Bamboos	...	...	...	...	...	...	...	...	...	2,363 1 11	...	29 11 2	...	...	35 4 0	...	2,428 1 1
d. Sandal-wood ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
e. Grass and other minor produce ...	...	...	...	...	...	...	...	...	...	9 11 6	...	121 15 7	...	...	...	...	131 11 1
II.—Timber and other produce removed from the Forests by consumers or purchasers	...	...	1,705 10 6	9 12 0	491 11 2	...	...	...	...	...	...	823 4 2	37,503 3 10	714 13 10	...	...	41,209 7 6
III.—Drift and waif wood and confiscated forest produce	2,576 14 6	...	3 0 0	160 0 9	2 12 0	...	1,276 7 6	...	...	...	...	...	...	323 3 0	...	...	4,642 5 9
IV.—Revenue from Forests not managed by Government—																	
a. Duty on foreign timber and other forest produce ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
b. Revenue from shared and private forests ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
V.—Rent of leased Forests and payments to shareholders in Forests managed by Government	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
VI.—Live-stock, stores, tools and plant—																	
a. Purchase of cattle	...	...	46 0 0	...	...	...	...	...	...	...	...	...	...	...	...	...	46 0 0
b. Feed and keep of cattle	...	...	443 3 8	...	411 6 6	...	584 2 3	4,989 10 0	445 9 8	381 4 6	...	534 13 6	...	...	978 6 6	...	8,768 8 7
c. Purchase of stores, tools and plant ...	1,098 4 0	175 2 6	426 0 6	204 0 0	167 5 6	30 0 0	158 11 11	83 11 6	...	226 7 0	8 10 0	258 15 4	901 9 0	490 12 0	190 4 0	...	4,419 12 9
VII.—Communications and buildings—																	
a. Roads and bridges	...	...	515 1 6	1,530 4 3	840 12 9	...	910 1 6	532 8 1	...	273 10 3	248 0 6	749 0 0	...	376 3 0	92 2 10	...	6,067 12 2
b. Buildings	...	...	3,715 11 11	2,591 14 2	2,046 7 6	...	334 0 6	1,185 14 6	...	636 11 1	46 10 0	368 9 4	856 3 9	2,806 6 6	683 2 2	...	15,473 11 5
c. Other works ...	...	...	...	...	...	...	46 1 6	...	...	66 4 6	...	...	3 12 0	...	...	...	116 2 0
VIII.—Demarcation, improvement and extension of Forests—																	
a. Demarcation ...	...	...	596 8 6	347 8 0	66 0 0	...	889 4 7	1,139 9 6	...	48 11 6	31 9 9	1,323 6 7	9 0 0	772 8 0	554 10 4	...	5,746 12 9
b. Compensation for land and rights	...	...	...	...	...	...	...	...	...	...	...	252 12 0	...	...	...	...	252 12 0
c. Surveys and working plans... ...	...	1,461 13 7	...	...	34 7 0	...	...	...	...	...	...	306 0 0	...	...	...	...	1,817 7 7
d. Sowing and planting	...	...	1,934 12 6	3 12 0	348 9 9	...	40 13 6	105 14 1	30 8 9	9 15 0	16 3 6	15 1 0	...	3,996 14 9	724 11 11	...	7,117 4 11
e. Protection from fire	...	...	107 4 0	1,709 5 11	3,793 4 11	...	1,635 11 4	2,847 8 7	...	747 12 1	185 8 0	539 3 7	...	...	4,161 11 10	...	15,727 6 3
f. Other works ...	...	...	286 5 6	176 9 3	163 1 0	...	115 0 0	658 6 6	...	...	20 0 0	...	...	...	118 12 0	...	1,548 2 3
IX.—Miscellaneous—																	
a. Refunds	...	...	133 9 9	...	...	...	...	...	...	...	...	12 0 0	201 12 6	...	325 0 0	...	672 6 3
b. Law charges ...	...	...	176 8 6	...	1 0 0	...	2 1 0	...	...	20 6 3	...	...	2 12 3	...	...	...	202 12 9
c. Other charges .	35 7 0	54 1 6	1,706 5 9	65 8 0	453 11 0	72 6 0	398 9 11	405 9 0	72 6 0	49 14 1	0 6 0	44 15 6	2,289 7 6	2,598 6 1	475 5 9	...	8,760 7 1
Total A.—Conservancy and Works	4,010 9 6	1,691 1 1	50,084 15 4	7,336 4 4	9,428 5 5	102 6 0	7,067 6 6	16,857 3 9	548 8 5	4,849 0 8	556 15 3	5,996 10 2	41,776 12 10	13,764 0 11	9,211 5 4	...	1,76,311 9 6

CALCUTTA,
The 19*th June* 1891.

I. C. BOSE,
Assistant Comptroller-General (Forests).

FORM No. 58—*concld.*

FOREST DEPARTMENT, BENGAL.

Summary of Expenditure of the different Divisions during 1890-91.

BUDGET HEADS.	Direction.	Working Plans Division.	Darjeeling Division.	Teesta Division.	Kurseong Division.	Julpigori Division.	Julpigori Sub-division.	Buxa Sub-division.	Chota Nagpore Division.	Palamow Sub-division.	Hazaribagh Sub-division.	Singbhoom Sub-division.	Sunderbuns Division.	Chittagong Division.	Orissa Division.	Kusi-Drift Division.	TOTAL.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Brought forward, Total A., Conservancy and Works	4,010 9 6	1,691 1 1	30,994 15 4	7,336 4 4	9,438 5 5	102 6 0	7,067 6 6	16,857 3 9	548 8 5	4,849 0 8	556 15 3	5,996 10 2	41,776 12 10	13,764 0 11	9,211 5 4	Nil.	1,73,311 9 6
B.—ESTABLISHMENT.																	
I.—Salaries—																	
a. Conservators	17,217 11 8	...	993 8 9	...	...	...	...	...	...	...	...	...	...	...	...	...	18,211 4 5
b. Superior officers	1,949 5 0	9,638 7 5	14,655 9 11	1,350 0 0	4,828 7 10	7,800 0 0	2,800 0 0	...	6,871 11 7	1,800 0 0	...	5,560 3 5	13,891 19 8	7,746 11 9	11,096 15 1	...	89,990 9 8
c. Subordinate Forest and Depôt establishments	360 0 0	...	4,897 12 5	4,652 15 6	5,977 13 7	...	4,004 1 0	3,970 13 11	...	2,467 12 3	864 0 0	4,251 4 6	14,106 0 11	10,603 6 5	4,874 9 6	...	61,060 10 0
d. Office establishments ...	4,612 14 4	896 0 0	1,522 13 11	572 0 0	723 14 7	...	648 0 0	840 2 9	1,275 6 5	548 15 7	...	660 1 4	3,217 8 8	1,303 9 7	1,422 0 6	...	18,243 6 2
e. Deputation and special allowances	896 12 6	180 0 0	299 12 3	...	0 12 9	...	...	...	...	...	...	...	233 12 2	1,135 1 3	162 6 1	...	2,908 8 11
II—Travelling allowances—																	
a. Conservators	2,737 11 9	...	428 11 2	...	...	...	...	...	...	...	...	...	...	...	...	...	3,166 6 11
b. Superior officers	192 5 0	4,093 0 0	3,825 14 0	495 13 0	1,137 3 0	...	547 0 0	1,260 9 0	1,019 0 0	770 6 6	...	854 8 0	1,662 9 6	2,221 15 6	1,144 4 9	...	19,294 7 6
c. Subordinate Forest and Depôt establishments	144 12 0	...	823 1 8	946 4 2	1,234 10 6	...	431 02	534 13 8	...	305 1 4	68 0 0	412 9 4	184 11 6	1,478 10 8	745 15 4	...	7,239 10 4
d. Office establishments ...	484 13 7	345 11 5	112 1 3	46 2 10	123 7 5	...	30 0	48 9 8	45 6 0	24 6 6	...	18 12 8	249 8 3	62 7 8	165 3 4	...	1,736 11 3
III.—Contingencies—																	
a. Stationery	...	...	...	...	...	...	...	...	...	...	...	0 6 6	0 8 6	3 12 3	1 4 3	...	5 14 6
b. Carriage of tents and records	352 5 9	74 1 6	126 14 0	42 10 0	5 10 0	...	9 14 0	8 4 6	56 12 3	4 1 10	...	20 8 6	96 1 0	22 8 0	44 7 6	...	764 1 10
c. Rents, rates and taxes ...	...	...	637 7 0	...	164 8 6	...	122 4 6	9 0 0	402 6 0	45 0 0	6 0 0	59 0 0	1,274 4 3	11 8 0	262 2 4	...	2,993 1 7
d. Pay of police guards ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
e. Official postage	400 12 6	15 0 0	146 10 0	93 13 6	149 7 6	30 0 0	85 10 6	199 10 6	122 6 6	33 10 6	14 12 6	131 2 0	575 6 6	292 5 6	291 14 0	...	2,464 8 0
f. Sundries	454 7 1	127 0 0	290 6 0	176 4 4	111 4 2	...	201 15 0	193 6 8	171 2 10	162 14 2	6 12 9	113 9 9	442 8 3	128 5 6	296 15 6	...	2,976 15 6
Total B.—Establishments ...	29,703 15 2	15,369 4 4	28,762 6 3	8,375 15 4	14,457 3 4	7,830 0 0	8,879 12 10	7,055 5 8	9,963 13 1	6,182 4 8	959 9 3	12,082 1 6	35,934 9 8	25,000 5 7	20,619 15 11	Nil	2,30,976 4 7
GRAND TOTAL OF EXPENDITURE	33,714 8 8	17,060 5 5	78,846 15 7	15,712 3 8	23,895 8 9	7,932 6 6	15,967 3 4	23,912 9 5	10,512 5 6	11,031 5 4	1,516 8 6	18,078 11 8	77,711 6 6	38,764 6 6	29,831 5 3	Nil	4,04,287 14 1

CALCUTTA,

The 19th June 1891

I. C. BOSE,

Assistant Comptroller-General (Forests.)

Form No. 59.

FOREST DEPARTMENT, BENGAL.

Account Current for the year 1890-91.

	Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.
To Cash balance	.....	303 2 9	By Expenditure as per Annual Summary Form No. 58	.....	4,04,287 14 1
„ VIII.—Assessed taxes— Income-tax—Deductions from salaries	.....	3,191 10 3	„ Deposits	.....	212 15 3
„ Revenue as per Annual Summary, Form No. 58	.....	7,27,392 3 3	„ Forest Cash Remittances—Local— Remittances to Treasuries	7,09,653 12 6	
„ Service Funds— Civil Fund—Ordinary, Bengal	.....		Inter-divisional Transfers	7,099 0 4	
„ „ Additional, Bengal	.....				7,16,752 12 10
Military Fund—Bengal	.....		„ Advances recoverable	.....	2,85,133 9 1
„ „ Madras	.....		„ Suspense	.....	205 8 0
„ „ Orphan Fund—Bengal	.....		„ Account current (other Governments)— Remittances to the Government of India	230 5 8	
Uncovenanted Service Family Pension Fund—Bengal	4,685 11 10		Remittances to the Government of North-Western Provinces and Oudh	5,078 8 0	
General Family Pension Fund	344 15 11		Remittances to the Government of Assam	23 11 0	
Hindu Family Annuity Fund	.....				5,332 8 8
		5,030 11 9	„ Inter-departmental transfers— Public Works Department (State Railways)—	Rs. A. P.	
„ Deposits	.....	446 0 4	Eastern Bengal State Railway	1,674 7 9	
„ Forest Cash Remittances—Local— Forest cheques drawn	3,78,408 7 6		Bengal-Nagpore Railway	290 8 0	
Inter-divisional Transfers	7,067 7 8				1,964 15 9
		3,85,475 15 2	Public Works Department (ordinary branches)	1,829 0 5	
„ Advances recoverable	.....	2,89,044 1 6	Military Department, Bengal ...	19,570 13 0	
„ Suspense	.....	2,649 13 6	Marine Department	861 5 0	
„ Account current (other Governments)— Remittances from Government of India	5,544 1 4		Civil Department— Jails	1,689 8 0	
Ditto ditto North-Western Provinces and Oudh	4,648 8 2		Miscellaneous	81 0 0	
Ditto ditto Central Provinces	206 0 0		Medical Store Department	57 8 0	
		10,398 9 6	Rewards for killing tigers	445 0 0	
„ Inter-departmental transfers— Public Works Department (ordinary branches)	111 4 0				26,409 2 8
Military Department, Bengal	45 5 0		„ Cash balance	.....	749 5 3
Marine Department	11,060 11 8				
Civil Department— Jail	1,941 4 0				
Mathematical Instrument Department	352 14 0				
Survey of India Department, Maps, &c.	75 3 0				
Miscellaneous	853 4 8				
Medical Store Department	801 3 0				
		15,241 1 4			
Total ...	.....	14,39,173 11 4	Total ...	.....	14,39,173 11 4

CALCUTTA,
The 19th June 1891.

I. C. BOSE,
Asst. Comptroller-General (Forests.)

Form No. 60.

FOREST DEPARTMENT, BENGAL.

Revenue received and Outstandings on account of Revenue during 1890-91.

Divisions.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the Department at end of year.	Remarks.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction	Bengal share, Gunduck drift operations.	...	4,993 9 8	4,993 9 8	4,993 9 8	...	
Darjeeling	Timber and other produce, &c.	272 8 6	89,647 12 11	89,920 0 5	89,768 2 5	151 14 0	
Teesta	Ditto ditto ...	30 8 0	21,557 3 2	21,587 11 2	21,587 11 2	...	
Kurseong	Ditto ditto ...	...	17,905 4 0	17,905 4 0	17,745 4 0*	...	* Rs. 160 deducted and written off on account of firewood tendered for, but delivery not taken.
Julpigori Sub-division ...	Ditto ditto ...	...	31,997 15 11	31,997 15 11	31,997 15 11	...	
Buxa ditto ...	Ditto ditto ...	...	23,358 2 5	23,358 2 5	23,358 2 5	...	
Islamow ditto ...	Ditto ditto ...	...	4,433 14 8	4,433 14 8	4,433 14 8	...	
Hazaribagh ditto ...	Ditto ditto ...	...	1,944 8 9	1,944 8 9	1,944 8 9	...	
Singbhoom ditto ...	Ditto ditto ...	571 0 0	25,460 8 0	26,031 8 0	26,009 0 0	22 8 0	
Sunderbuns	Ditto ditto ...	...	4,10,482 13 2	4,10,482 13 2	4,10,482 13 2	...	
Chittagong	Ditto ditto ...	...	82,249 10 8	82,249 10 8	(a)82,249 10 8	...	(a) Rs. 9,418-6-6 deducted, being payment made as Maharaja of Hill Tipperah's share of Fenny revenue collections during 1889-90.
Orissa	Ditto ditto ...	...	12,605 6 5	12,605 6 5	12,605 6 5	...	
Kusi	Drift operations	...	216 0 0	216 0 0	216 0 0	...	
	Total ...	873 11 6	7,26,852 13 9	7,27,726 9 3	7,27,392 3 3	174 6 0	

FORM No. 61.

FOREST DEPARTMENT, BENGAL.

Outstandings and Liabilities on account of Contractors and Disbursers for 1890-91.

Divisions.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Direction	...	1,645 7 11	1,645 7 11	244 6 8	1,774 14 8	2,019 5 4	373 13 5	...
Working Plans	...	859 14 5	859 14 5	14 14 10	905 0 0	919 4 10	59 6 5	...
Darjeeling	...	37,962 0 0	37,962 0 0	1,861 13 6	36,388 11 5	38,250 8 11	288 8 11	...
Teesta	...	14,818 12 9	14,818 12 9	215 4 6	15,003 3 2	15,218 7 8	399 10 11	...
Kurseong	...	23,478 3 6	23,478 3 6	590 2 7	23,140 11 10	23,730 14 5	252 10 11	...
Julpigori	...	...	...	...	...	...	...	...
Ditto Sub-division...	...	10,639 14 11	10,639 14 11	557 1 0	10,586 7 1	11,143 8 1	503 9 2	...
Buxa ditto ...	...	27,386 13 10	27,386 13 10	2,130 14 7	26,364 0 8	28,494 15 3	1,108 1 5	...
Chota Nagpore	...	1,363 8 1	1,363 8 1	24 1 7	1,370 11 6	1,394 13 1	31 5 0	...
Palamow Sub-division ...	...	6,840 14 2	6,840 14 2	114 3 2	6,846 8 9	6,960 11 11	119 15 9	..
Hazaribagh ditto ...	...	1,411 8 0	1,411 8 0	120 14 6	1,471 0 0	1,591 14 6	180 10 9	...
Singbhoom ditto ...	...	12,811 11 9	12,811 11 9	997 7 4	12,407 4 5	13,404 11 9	593 0 0	...
Sunderbuns	...	68,547 7 7	68,547 7 7	1,506 8 11	89,298 7 9	90,805 0 8	2,351 5 2	33 12 1
Chittagong	...	29,427 11 2	29,427 11 2	1,772 9 9	28,661 3 8	30,433 13 5	1,006 2 3	...
Orissa	...	29,850 5 8	29,850 5 8	1,045 6 10	28,015 4 2	30,560 11 0	710 5 4	...
Kusi Drift	...	...	...	...	...	...	...	...
Total ...	...	2,80,044 1 6	2,80,044 1 6	11,855 3 9	2,85,133 9 1	2,96,988 12 10	7,978 7 5	33 12 1

CALCUTTA,
The 19*th June* 1891.

I. C. BOSE,
Assistant Comptroller-General (Forests).

FORM No. 62.

FOREST DEPARTMPNT, BENGAL.

Financial results of the year 1890-91.

Division.	Timber and other produce removed from the Forests by Government Agency.		Other Revenue.		Formation, protection and improvement of Forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Direction	4,993	2,877	...	...	30,838	4,993	33,715	
Darjeeling	50,706	45,287	32,070	17,163	16,397	80,768	78,847	
Kurseong	1,146	952	16,597	9,338	13,585	17,745	23,896	
Teesta	1,013	1,006	20,375	3,433	11,273	21,588	15,712	
Julpigori	4,154	1,342	27,844	8,470	10,121	31,998	19,933	
Buxa	4,349	8,972	19,009	5,000	13,007	23,358	27,870	
Sunderbuns	213	...	4,10,270	71,895	5,816	4,10,483	77,711	
Chittagong	2,585	2,413	79,865	15,934	20,418	82,250	38,765	
Orissa	1,123	1,736	11,482	10,069	17,826	12,605	29,631	
Singbhoom	7,001	3,154	19,008	7,530	11,766	26,009	22,450	
Palamow	3,745	3,966	680	4,498	6,947	4,434	15,411	
Hazaribagh	42	...	1,903	135	3,134	1,945	3,269	
Kusi (drift)	216	...	...	...	...	216	...	
Working Plans	...	...	...	...	17,060	...	17,060	
Total ...	87,180	71,705	6,40,212	1,54,305	1,78,188	7,27,392	4,04,288	

APPENDIX A.

Statement showing the Boundary Work executed during the year 1890-91.

Divisions.	New demarcation.			Clearing and maintaining boundaries and boundary marks.				Length of boundaries demarcated and cleared during 1890-91.
				Charged against A VIIIa—Demarcation.				
	Length of boundaries.	Marks erected.	Cost against A VIIIa.	Length of boundaries cleared.	Number of marks renewed.	Cost.	Charged against A VIIIe "Roads and bridges," and A VIIIe "Protection from fire."	
	Miles.	No.	Rs.	Miles.	No.	Rs.	Miles.	Miles.
Darjeeling	...	...	...	81·19	287	461	...	81·19
Teesta	...	...	...	...	1,224	317	195·75	195·75
Kurseong	1·95	10	9	...	168	57	240·50	242·45
Julpigori	...	...	...	107·20	262	889	...	107·20
Buxa	...	...	...	103·32	54	14	...	103·32
Palamow	...	...	...	...	333	41	166·00	166·00
Direction	...	...	...	13·50	45	7	34·40	47·90
Singbhoom... ...	...	...	...	686·00	469	1,325	...	686·00
Chittagong	...	...	...	60·00	710	1,775	...	60·00
Angul	...	...	...	...	37	1	150·00	150·00
Khorda	...	...	...	...	202	110	158·12	158·12
Total ...	1·95	10	9	1,057·21	3,821	4,999	944·77	2,003·03

APPENDIX B.

Comparative statement showing the area of Reserved Forests in the several divisions open to grazing during the year 1890-91.

Divisions.	Total area of Reserved Forests.	Open to grazing.		Remarks.
		1889-90.	1890-91.	
	Acres.	Acres.	Acres.	
Darjeeling Division ...	65,540	50,686	50,686	Under Government rules and orders.
Teesta ,, ...	159,821	124,095	124,095	
Kurseong ,, ...	55,539	3,596	3,596	
Julpigoree ,, ...	118,343	300	300	
Buxa ,, ...	160,247	1,200	1,200	
Palamow ,, ...	120,389	120,389	120,389	
Direction ,, ...	30,865	400	400	
Singbhoom ,, ...	467,350	467,350	467,350	
Sunderbuns ,, ...	1,007,866	...	...	
Chittagong ,, ...	886,740	...	...	
Angul ,, ...	179,200	179,200	179,200	
Pooree ,, ...	60,144	...	...	
Total ...	3,321,044	947,216	947,216	

W. J.—Reg. No. 1631J—340—20-7-91.

REVENUE DEPARTMENT.

FORESTS.

CALCUTTA, THE 25TH AUGUST 1891.

RESOLUTION.

No. 504For.

READ—

The Progress Report of the Forest Administration in Bengal for 1890-91.

The report was submitted to Government twelve days after it was due. It is written by Mr. E. P. Dansey, who assumed charge of the circle on the 9th October 1890, on which date Mr. Home availed himself of the furlough for 2 years granted to him. The most important administrative reform introduced by Mr. Dansey, with the sanction of Government, was the abolition of the system under which Divisional Forest Officers supervised the working of groups of subdivisions in addition, in some cases, to holding direct charge of one or more subdivisions, and the substitution of independent divisions, all directly under the Conservator. By this means the services of the Divisional Officers were made available for duties in regard to which the paucity of officers was being keenly felt. The new and the old arrangement of charges are compared below:—

Old.				*New.*	
No.	Name of Division.	No.	Name of Subdivision.	No.	Name of Division.
1	Darjeeling ...	1	Darjeeling ...	1	Darjeeling.
		2	Tista ...	2	Tista.
		3	Kurseong ...	3	Kurseong.
2	Jalpaigori ...	4	Jalpaigori ...	4	Jalpaigori.
		5	Baxa ...	5	Baxa.
3	Chota Nagpur ...	6	Palamau ...	6	Palamau.
		7	Singbhum ...	7	Singbhum.
		8	Hazaribagh ...	8	Sundarban.
4	Sundarban.			9	Chittagong.
5	Chittagong.			10	Angul.
6	Orissa ...	9	Angul ...	11	Puri.
		10	Khurda ...	12	Direction.

The Working Plans Division had hitherto a nominal existence, and even after the redistribution of charges the number of officers available is not sufficient for keeping up a separate Working Plans Division. It has therefore been decided to abolish this division and to depute selected officers, when necessary, for the preparation of working plans.

The reconstitution of forest charges above described was only begun during the year under report, and it was not until the current financial year that the arrangements could be completed. The annual forms attached to the report under review have, however, been drawn up in accordance with the new arrangement of charges.

Area.

2. As compared with the preceding year, there was a decrease of 6 square miles in the area of Reserved forests, and 30 square miles in that of Protected forests on account of the disforesting of certain lands in the Sundarban forests for the extension of cultivation. The total area of Reserved forests stood at 5,189 square miles, and of Protected forests at 2,209 square miles, while there was no change in the area of Unclassed State forests and waste lands under the partial management of the Forest Department. There seems to be room for extension of the forest area in

Chittagong; but it is mainly in the Darjeeling and Jalpaigori districts and in Chota Nagpur that efforts should be made to increase the forest area and meet the great demand for timber and fuel by the tea estates and the public. The forests in the Government estates of the Sonthal Pergunnahs are under the management of the civil officers: there is perhaps room for expansion here also, but for political reasons the Sonthal Pergunnahs require careful handling. The Conservator has been instructed to visit this district during the cold weather and to report upon the whole question of the forests there.

Boundaries.

3. The state of the boundaries between the Angul Reserves and the neighbouring Tributary States, and between the Singbhum Reserves and the Tributary estate of Keonjhar in Orissa, should be reported to Government separately.

Establishment.

4. Of 8 natives of Bengal who were sent to the Imperial Forest School at Dehra Dun during the past seven years, 5 have resigned their appointments. One has been on sick leave almost continuously since 1888, when he obtained a Ranger's certificate with honours, and one only of the number is reported to have borne a good reputation. This officer has done well and is now a Ranger on Rs. 50. Regarding the remaining individual not much is known, good or bad. On a review of the whole subject of an efficient executive Forest staff for Bengal, the Officiating Conservator thinks it deserving of consideration whether that staff should not be recruited, as far as possible, from among the hardier races of Northern and Central India. This is a serious assertion of the inferiority of the Bengali *personnel* in the Forest service, which the Lieutenant-Governor has perused with regret. If the natives of Bengal cannot show themselves fit for the work required, it will be incumbent on Government to seek for better material elsewhere, but it is hoped that a greater encouragement of athletic exercises as a part of school education may help to train a generation which will not be liable to this reproach. In any case, Sir Charles Elliott has no wish to make a sudden change and will watch the working of the present system.

Legal Proceedings.

5. A probationary Forest Ranger, in charge of the Darjeeling Forest Depôt, was prosecuted for misappropriation of Government money to the extent of Rs. 970, convicted, and sentenced to three months' rigorous imprisonment with fine. The ringleader in the Chittagong murder and robbery case, referred to in paragraph 3 of the Resolution on the Forest Administration Report for the previous year, is still at large. The total number of prosecutions for breaches of the Forest law was 203, and of cases compounded 1,961, against 120 and 2,524 respectively in the previous year. There was an improvement in the percentage of convictions, being 87 against 80 in the year 1889-90. The Sundarban Division is said to be responsible for the increase in the number of prosecutions, as well as the decrease in the number of cases compounded.

Fires.

6. It is noticeable that the most destructive fires occurred in the specially protected areas of the Jalpaigori and Angul Divisions, where the supervision of the Divisional Officers was least efficient. It is reported that Mr. Green, who was in charge of the Jalpaigori Division, could not go into camp during the warm months on account of ill-health. The Lieutenant-Governor thinks that Mr. Green ought in the circumstances to have taken leave. In the case of Angul, the Lieutenant-Governor regrets to find that the Divisional Officer, Mr. Richardson, was not aware of the occurrence of fires until he happened to go to the spot with the Conservator, and that he had delegated the duty of protection to a Forester wholly incompetent for the purpose.

Altogther there was an increase of 247 square miles in the specially protected area, 94 per cent. of the total area of reserves escaped fires, while there was a failure to protect 75 square miles, and no attempt made to protect 257 square miles.

Grazing.

7. The Conservator expresses an opinion that grazing is not less injurious than fires to a deteriorated Indian timber forest. The Lieutenant-Governor agrees in this view; but the Conservator appears to be also of opinion that grazing is, as a rule, only permitted for the purpose of increasing the Government revenues.

The Lieutenant-Governor believes that the object will usually be found to have been not the increase of revenue, but a desire not to be hard upon the people, who grievously resent any restriction of their grazing rights. He has lately insisted, in the case of the Angul forests, on adequate grazing grounds being reserved for the cattle of the villagers, so that there may be no necessity for a modified admission of grazing rights within the forest area and no risk of injury to the growth of forest produce.

Plantations.

8. There was an increase in the area of plantations during the year from 3,012 acres to 3,143 acres in Darjeeling, Kurseong, and Chittagong, and in cultural operations from 999 acres to 1,138 acres in Darjeeling, Jalpaigori and Orissa. The total cost under this head is Rs. 6,977, against Rs. 6,604 during the previous year.

Outturn.

9. The total outturn of timber during the year was 8,332,421 cubic feet, of which 33,536 were removed departmentally, 8,224,361 were removed by purchasers, and 74,524 were free grants. The corresponding figures for the previous year are 44,173, 10,172,896, and 21,739 cubic feet respectively. The Sundarban Division is chiefly responsible for the large decrease in the quantity of timber removed by purchasers. Various causes are assigned for this. The Divisional Officer attributes the unfavourable result to the glut of sundri timber in the market owing to excessive exports in the previous two or three years. But Mr. Dansey seems to favour the idea that indiscriminate fellings spread over wide areas have exhausted the valuable timber in accessible areas, and he thinks that better results may be expected by concentrating the fellings on selected areas by rotation. Sir Charles Elliott has, on his recent tour, considered the subject at Khulna, on the margin of the Sundarban, with the local Forest officers, and has expressed his concurrence with the Conservator's view that the time has come for the introduction of the system of dividing the total area into blocks for annual operations: he has accordingly authorised the preparation of a Working plan on the lines suggested by Mr. Dansey for professional examination.

10. The total outturn of fuel during the year was, excluding free grants, 16,597,245 cubic feet, as compared with 15,232,047 in 1889-90. Part of this increase is attributed to the prohibition practically imposed on the imports of charcoal from Sikhim into the station of Darjeeling. There was a falling off by 70 per cent. in the outturn of fuel by departmental agency in the Kurseong and Tista Divisions. In the latter the decrease is compensated by increase in the removals by purchasers; but in Kurseong there was an unaccountable decrease in both respects, which the Conservator might surely have enquired into himself instead of asking the Divisional Officer to do so.

The figures for the increased consumption of fuel in the Orissa Division are said to have been roughly calculated on the number of licenses issued to the ryots of the Khurda Government estates for fuel required for their own consumption. The data for the increase in free grants of fuel are equally untrustworthy; but in both cases exact figures have been used. Rough estimates of this description should always be in round numbers.

Financial results.

11. The following tables compare the financial results of the year under report and of the preceding year in a collected form:—

Financial results in Forest Divisions for the years 1889-90 *and* 1890-91, *as shown in Form No.* 58.

1889-90.

Division.	Receipt.	Expenditure.	Profits.	Loss.	Remarks.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction	5,818 15 10	30,876 0 1	.....	25,057 0 3	
Working Plans ...	.....	13,135 2 8	...	13,135 2 8	
Darjeeling	1,19,238 2 4	1,14,472 5 1	4,765 13 3	.....	Comprising the Darjeeling, Tista and Kurseong subdivisions.
Jalpaigori	55,931 2 0	46,270 1 11	9,661 0 1	.....	Comprising the Jalpaigori and Baxa sub-divisions.
Chota Nagpur... ...	19,304 2 7	46,801 11 5	.....	27,497 8 10	Comprising the Palamau, Hazaribagh and Singbhum subdivisions.
Sundarban	4,85,458 2 3	78,663 15 10	4,06,794 2 5	.....	
Chittagong	73,038 2 9	32,509 12 8	40,528 6 1	.....	
Orissa	9,928 13 8	27,535 7 11	.....	17,606 10 8	Comprising the Angul and Khurda subdivisions.
Total for 1889-90 ...	7,68,717 9 0	3,90,264 9 7	4,61,749 5 10	83,296 6 5	Surplus = Rs. 3,78 452-15-5

1890-91

Division.	Receipts.	Expenditure.	Profits.	Loss.	Remarks.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction	4,993 9 8	33,714 8 8	.....	28,720 15 0	
Working Plans ...	.....	17,060 5 5	.....	17,060 5 5	
Darjeeling	1,29,101 1 7	1,18,454 12 0	10,646 5 7	.....	Comprising the Darjeeling, Tista and Kurseong subdivisions.
Jalpaigori	55,356 2 4	47,812 2 9	7,543 15 7	.....	Comprising the Jalpaigori and Baxa subdivisions.
Chota Nagpur... ...	32,387 7 5	41,138 15 0	.....	8,751 7 7	Comprising the Palamau, Hazaribagh and Singbhum subdivisions.
Sundarban	4,10,482 13 2	77,711 6 6	3,32,771 6 8	.....	
Chittagong	82,249 10 8	38,764 6 6	43,485 4 2	.....	
Orissa	12,605 6 6	29,631 5 8	.....	17,025 14 10	Comprising the Angul and Khurda subdivisions.
Kosi drift wood ...	216 0 0	.....	216 0 0	.....	
Total for 1890-91 ...	7,27,392 3 3	4,04,287 14 1	3,94,663 0 0	71,558 10 10	Surplus=Rs. 3,23,104-5-2.

The net revenue was Rs. 55,349 less than the preceding year; but, compared with the average of the five years ending 31st March 1890, there was an increase of Rs. 42,064.

12. There was a fall of Rs. 75,000 in the revenue of the Sundarban Division, though all other divisions show an increase: hence the gross revenue of the province for 1890-91 was less than in the preceding year by Rs. 41,000. On the other hand, the expenditure in all divisions increased by Rs. 14,000, chiefly under the head of Establishment, but the increase includes a sum of Rs. 2,201 written off the accounts in connection with the theft in the Kassalong Range, Chittagong, referred to in paragraph 21 of the Report for 1889-90. Such fluctuations are not uncommon, and, except in the Sundarban case, do not call for explanation. The decrease in the Sundarban will, it is hoped, be recouped when a regular working-plan is introduced. The Lieutenant-Governor trusts that Mr. Dansey will, in his zeal for the improvement of Forest administration, not forget the necessity of contributing to the general revenue of the province. The Conservator thinks that the price of fuel at Darjeeling may well be raised in consideration of the increased cost of procuring it as the working recedes further from Darjeeling, and also of the price of firewood at other hill stations in India. No statistics are, however, given on the latter point. The deficits in some of the divisions are attributed by the Conservator to two causes: first, that the forests had been already exhausted before they came under the management of the Forest Department; and secondly, that they are surrounded by other forests, the supply in which is practically free: the latter cause serves, in the Conservator's opinion, to strengthen the reserves, which are not yet ripe for extensive cuttings. The idea of the previous depletion of forests as a cause of scanty revenue is one which has been sometimes advanced by Forest officers without sufficient investigation.

13. In conclusion, Sir Charles Elliott desires to express his appreciation of the way in which Mr. Dansey has carried out the duties of Conservator since he assumed charge of this post.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

Offg. Secretary to the Govt. of Bengal.

No. 505For.

Copy, with copy of the report, forwarded to the Conservator of Forests, Bengal, for information and guidance.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

Offg. Secretary to the Govt. of Bengal.

Calcutta,
The 27th August 1891.

I.—Reg. No. 3221C—446—28-8-91.

No. 1292-F., dated Calcutta, the 5th December 1891.

From—SIR E. C. BUCK, Kt., Secretary to the Government of India, Revenue and Agricultural Department,

To—The Secretary to the Government of Bengal.

I AM directed to acknowledge the receipt of Mr. Buckland's letter No. 506 (Forest), dated the 27th August last, forwarding the Progress Report of Forest Administration in Bengal for the year 1890-91, together with His Honour the Lieutenant-Governor's Resolution thereon.

2. The areas under the control of the Forest Department underwent no material alteration during the year under review. A decrease of 6 square miles occurred in the area of reserved, and of 30 square miles in that of protected forests. In both cases the object of disafforestation was the extension of permanent cultivation. At the close of the year under review the Province contained 5,189 square miles of reserves, of which 183 square miles were under settlement. The area of protected forests aggregated 2,209 square miles, and that of unclassed forests under the management of the Forest Department 4,500 square miles. The question of the extent to which these large areas can be subjected to a legal settlement of private rights and converted into reserved forests is a matter for serious consideration. The desirability, also, of extending State control over certain other forests is an equally important subject of enquiry. The Governor General in Council observes with satisfaction that both these questions are engaging the attention of His Honour the Lieutenant-Governor and the Forest Department under his control.

3. His Excellency in Council has perused with regret the remarks made in paragraph 8 of the Report regarding the difficulties that have attended the administrative settlement of the Angul reserve. The cancelment, for want of claim, of rights covered by written grants from Government, and capable of verification from the records of local Courts, cannot fail to cause discontent and prejudice the people against the forest law. It is satisfactory, therefore, to know that His Honour has ordered the submission of a separate report on the subject.

4. The survey of forest-reserves was delayed, partly by difficulties in the supply of labour, and partly by sickness. Another reason advanced was the still unsettled state of the boundaries between the Saranda reserve and the neighbouring Tributary State; but it is not clear that this last difficulty, the existence of which was previously known, might not have been obviated by a special effort to secure a final alignment of the boundary in advance of the Survey Party.

5. No additional areas were brought under the provisions of working-plans during the year under review, but the remarks made by the Conservator in paragraphs 12 to 16 of his Report show, to the satisfaction of the Government of India, that Mr. Dansey has lost no time in attacking this important branch of forest administration with energy and method, and it may be hoped that there will be no recurrence of the defects found in some of the valuation surveys of former years, owing to which the working-plans based thereon had to be abandoned.

6. With reference to the Conservator's remark that the subject of communications has not as yet received sufficient attention, I am to suggest, for His Honour the Lieutenant-Governor's consideration, the advisability of preparing a general project for the extension of forest roads during a series of years. The inevitable result of a want of system must be, as in the instances cited by the Conservator, that some of the roads will be found impracticable for traffic and the expenditure upon them wasted. Such a forecast as is now suggested need not interfere with the occasional construction of roads required for any special purpose.

7 There was a considerable increase in the number of forest offences brought before the Courts, accompanied by a corresponding increase in the percentage of convictions. From paragraph 23 of the Conservator's Report it is gathered that the large decrease in the number of cases compounded is due to more efficient control, which resulted in an actual diminution in the number of attempts at illicit traffic in the Sundarbans.

8. The results of fire-protection were on the whole satisfactory. The most disastrous fires took place in the Jalpaiguri and Angul Divisions. In both

cases the personal control by the Divisional Officers of the arrangements made for special protection seems to have been insufficient, and has attracted the animadversion of the Lieutenant-Governor and the Conservator. The personal inspection and control of fire protective measures during the hottest season, disagreeable though it may be, constitutes a most important duty of the Divisional Officer, and ought not to be relegated to the subordinate establishment, especially in the absence of an efficient staff of Rangers.

9. Appendix B to the Report shows that over the whole Province less than one-third of the reserved area is open to grazing. It appears, however, that while in some of the divisions the whole of the reserves are open to grazing, in others it is allowed in only a small fraction of the area or not at all. It must be admitted that continuous grazing is the cause of extensive injury to forests which have undergone deterioration, and should be arrested whenever possible. On the other hand, the necessity of providing for the established rights and just requirements of the people must not be overlooked. The attainment of both objects can best be effected, in the opinion of the Government of India, by the closure of blocks in fixed rotation and for periods of sufficient length to ensure reproduction and an improvement of soil and forest-growth.

10. Natural tree-reproduction in the Bengal forests is reported to be satisfactory wherever fires are excluded and grazing is sufficiently confined and regulated. The remarks regarding the reproduction of sâl have been read with special interest, and there seems no doubt that forests of a vastly improved character will result from the treatment now proposed. Methodical experiments, in the removal of undergrowth and the thinning out of parent trees of inferior species, should be continued, and further efforts should be made to free the forests, especially those in the Tarai, from the creeper-pest, which, as pointed out by the Conservator, impedes the natural development of the forest-growth to a great extent. Artificial reproduction plays no very important part in the forest management of Bengal, but the question might be considered whether the system of toungya arboriculture, as practised in Burma, could not with advantage be introduced into some parts of the Province. His Excellency in Council is glad to observe that the attempts to introduce the mahogany tree are being continued.

11. The outturn from the forests, compared with that of the previous year, was as stated in the following table :—

Agency by which removed.	Timber.	Fuel.	Bamboos.	Minor Produce.
Reserved Forests.	C. ft.	C. ft.	No.	Rs.
By Government	13,294	443,509	447,496	1,219
,, Purchasers	7,488,466	10,782,318	5,418,120	78,984
Free Grants	10,980	1,014,449	50	1,722
TOTAL ...	7,512,740	12,240,276	5,865,666	81,925
Protected Forests.				
By Government	125	242	...	...
,, Purchasers	400,821	5,059,596	157,710	10,650
Free Grants	3,269	2,500,000	3,860,640	68,896
TOTAL ...	404,215	7,559,838	4,018,350	79,546
Unclassed Forests.				
By Government	20,118	19,355	8,560	...
,, Purchasers	335,074	292,225	10,493,062*	8,776
Free Grants	60,275	...	3,000	60
TOTAL ...	415,467	311,580	10,504,622	8,836
GRAND TOTAL, 1890-91 ...	8,332,422	20,111,694	20,388,638†	1,70,307
,, ,, 1889-90 ...	10,238,808	19,734,196	19,224,487	2,51,459
Increase or decrease in 1890-91	—1,906,386	+ 377,498	+ 1,164,151	—81,152

* Besides permit fees on bamboos, the number of which is not given, but the value of which is shown as Rs. 2,287.

† Value Rs. 57,473.

The remarks made by the Conservator in paragraphs 65, 66 and 69 of his Report and concurred in by His Honour the Lieutenant-Governor have been read with great interest, and demonstrate, in the opinion of the Government of India, the necessity of gradually localizing the fellings of sundri and other valuable species of timber by means of working-plans.

12. The following table compares the financial results of the year with those of the previous year, as well as with the average of the last five years :—

Year.	Receipts	Charges	Surplus.	Proportion of Surplus to gross Revenue
	Rs.	Rs.	Rs.	Per cent.
1890-91	7,27,392	4,04,288	3,23,104	44
1889-90 . ..	7,68,718	3,98,150	3,70,568	48
Increase or decrease in 1890-91	—41,326	+6,138	—47,464	— 4
Average for the five years ending 1889-90	6,70,897	3,91,594	2,79,303	42

The fall in the revenue has been fully explained in paragraph 12 of His Honour's Resolution and is due to causes beyond the control of the Forest Department.

13. The Government of India approve of the reconstitution of Forest Divisions described in the first paragraph of Sir Charles Elliott's Resolution, and trust that it may be possible before long to restore to the Conservator the services of an efficient Personal Assistant. They have read with concern the Conservator's remarks regarding the health of the Upper Controlling Staff, and share His Honour's regret regarding the asserted inferiority of Bengalis for forest service in the Lower Controlling Staff. They agree with Sir Charles Elliott that no sudden change should be made in recruiting the personnel for the Provincial service. There is reason to believe that the constitution of the Ranger-class and the prospects of promotion in it were insufficient to attract the best class of men, and the results of improved prospects should be awaited before any radical changes are made. In the meantime it is hoped that the Lieutenant-Governor's anticipations of improved activity and energy on the part of the Bengali subordinates may be fully realised.

14. His Excellency in Council desires me to thank Sir Charles Elliott for the great interest exhibited by him in the forest administration of Bengal and for his exhaustive and able Resolution, and cordially endorses his appreciation of Mr. Dansey's services.

G. C. Press, Simla.—No. 1077 R. & D.—16-12-91 —825.